A Checklist of Diatom Species Reported (and Presumed Native) from Canadian Coastal Waters

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ABSTRACT

Mather, L., MacIntosh, K., Kaczmarska, I., Klein, G. and Martin, J.L. 2010. A checklist of diatom species reported (and presumed native) from Canadian coastal waters. Can. Man. Rep. Fish. Aquat. Sci. 2881: iii+ 78 p.

The transportation of phytoplankton via ballast water is one of the main vectors allowing organisms to establish themselves in new environments. Since the 1970s, both the frequency of ocean crossings and the volume transported has increased. Therefore, it is to be expected that the potential for invasion would have also increased.

Although reviews on the species richness of native biota have been done for some areas of the world, a clear and concise list of the presumed native biota for Canadian waters has yet to be documented.

The aim of this report is to provide a list of diatom species found as their names appear in the cited literature, as well as their current valid name, from the Canadian and the neighbouring north, east, and west coasts of North America. This will allow for a better understanding of the presumed native diatoms, and thus the potentially non-native diatom species, documented in Canadian waters. As well, it provides a time-line for when these organisms were documented as occurring in our waters.

RÉSUMÉ

Mather, L., MacIntosh, K., Kaczmarska, I., Klein, G. and Martin, J.L. 2010. A checklist of diatom species reported (and presumed native) from Canadian coastal waters. Can. Tech. Rep. Fish. Aquat. Sci. 2881: iii+ 78 p.

Le transport des eaux de ballast est un des vecteurs principal dans le transfert du phytoplancton qui permet à ces organismes de s'établir dans un nouvel environnement. Depuis les années 1970 la capacité et la fréquence des navires long courrier ont augmenté, ainsi que le potentiel d'invasion.

Ailleurs au monde, des recensements de la richesse des espèces natives ont été achevés mais jusqu'à date il n'y a aucune liste documentée pour les diatomées présumées indigènes dans les eaux canadiennes.

Le but de ce rapport est de dresser une liste des diatomées trouvées dans les eaux canadiennes et des côtes adjacentes du nord, est et ouest de l'Amérique du Nord. Cette liste comprend le nom de l'espèce comme il apparaît dans la littérature citée ainsi que le nom courant valide. Elle offre une meilleure compréhension des diatomées dites natives et subséquemment des espèces non indigènes dans les eaux canadiennes. Également, cette liste permet de dresser une ligne temporelle depuis quand ces organismes ont étés observés dans nos eaux canadiennes.

INTRODUCTION

The confirmed introduction of non-indigenous and toxic or harmful phytoplankton species via ballast water in Australia (Hallegraeff et al. 1988) and other waters around the world has established a growing concern regarding our ability to recognize newcomers for the North American coasts (Edlund et al. 2000, Mills et al. 1993, Ricciardi 2001). The possibility for invasion of a species is not only determined by whether or not a transfer vector is available to the organism, but whether or not the environmental conditions, such as nutrient availability and temperature, of the new location facilitate survival. These introduced organisms pose obvious ecological risks to native habitats but the risk is further magnified by the potential that such organisms may become toxigenic or otherwise harmful once introduced. However, before identifying a species as alien, a good understanding of species richness in native biota is needed. Examples of documentation of native species include: diatoms of the United States (Patrick and Reimer 1966, 1975), diatoms of Europe (Hustedt 1930, 1939, Krammer 2000, 2002, Lange-Bertalot 2001) and diatoms of British coast (Hendey 1964). Such systematic work from the microbial community is yet to be undertaken for marine diatoms in Canadian waters.

This work was initiated through a project funded by the Canadian Aquatic Invasive Species Network (CAISN) to study the potential for diatoms to invade Canadian marine and freshwater environments through the transport of ballast water. CAISN is an organization that is conducting a comprehensive study examining and identifying existing invasions with the goal of preventing future invasions from foreign locations into Canadian ports. The overall mission of CAISN is to reveal to the public the results of an expansive network of research and to raise awareness and initiate policy changes when it comes to aquatic invasive species. As part of this project, ballast water samples from ships coming to the ports of Halifax and Montreal (East Coast), Vancouver (West Coast), and the Great Lakes were examined for the potential of diatoms species to survive and thrive in these tanks. As this research was conducted, a list of species' names and references was collected to aid in mapping the potential for change in species' composition in our waters.

This report documents diatoms (Bacillariophyta) that have been observed in Canada and the neighbouring north, east and west coasts of North America, and thus would be expected to naturally occur in Canadian waters.

Reported species are documented, including: 1) the diatom species name listed as it appears in its original publication; 2) the species current and valid name; and, 3) the common synonyms, verified through the two taxonomic databases: algae base and catalogue of life (algaebase.org, catalogueoflife.com). Use of invalid names or synonyms can cause erroneous or confusing reports of species of micro-biota. Diatom species reported h re were collected from a total of thirty published sources that represent the years spanning 1910-2008 (see Appendix 1), and five lists obtained through personal communications (B. Ginn, Dept. of Biology, Queen's University, 116 Barrie St., Kingston, ON Canada K7L 3N6; L.A. Hobson, University of Victoria, PO Box 1700 STN CSC, Victoria, BC Canada V8W 2Y2; R.A. Horner, University of Washington, Box 357940, Seattle, WA 98195-7940; J.L. Martin, Biological Station, 531 Brandy Cove Road, St. Andrews, NB Canada E5B 2L9; and C. Rafuse, National Research Council Institute for Marine Biosciences, 1411 Oxford Street, Halifax, NS Canada, B3H 3Z1). Ballast waters from transoceanic vessels can be a major means by which diatoms are transported to ports throughout

the world. The volume and frequency of these ocean crossing vessels has significantly increased since the 1970s, with increasing introductions at the close of the 20th century (Carlton 1996), a time span sufficient for microorganisms such as diatoms to establish themselves in Canadian waters. Examples from the macroscopic level include species such as the zebra mussel (*Dreissena polymorpha*) and the Emerald ash boring beetle (*Agrilus planipennis*) - non-indigenous invaders that are now well established in Canada. There is growing evidence that the potential for invasions to occur at a microscopic level exists as well - as has been documented for the species *Didymosphenia geminata* (Lyngbye) M. Schmidt (Blanco and Ector 2009) and *Thalassiosira baltica*, (Edlund et. al. 2000) - all of which necessitates more research focusing on microbes, both native and those arriving from exotic locations.

In this list, some diatoms presumed by many to be non-indigenous diatoms, have been found to be reported in some locations in Canada as early as 1910. One such example is *Achnanthes subsessilis* K., (Bailey 1910). Another example is *Pseudo-nitzschia fraudulenta* (Cleve) Hasle, a species thought to be cosmopolitan, but was first observed in the Bay of Fundy as recently as the year 2008 (Martin and LeGresley 2008). Some species such as *Tabellaria flocculosa* (Roth) Kützing, (Hay et. al. 2003; Bailey 1913) are most likely native to our waters as they have been reported both before and after 1970, when the volume and frequency of ocean crossing vessels began to increase substantially (Carlton 1996). As more organisms become established, it is increasingly difficult to determine whether or not species are indigenous or introduced. Thus, uncovering the time-lines to which these species occur can indicate the possibility for establishment of new species in our coastal waters as well as the potential for species (native/non-native) to sustain themselves within the environment. More species, established through ballast water transport, are indicated in a manuscript written by Klein et al. (2009).

We appreciate that some taxa included in this report might have been introduced centuries ago given that seafaring communities have existed on the Canadian East coast since the 1600s. Until presented with evidence to the contrary, we assume these species to be indigenous.

The goal of this compilation is to provide baseline data of our current understanding of marine diatom species composition in Canada. This will aid in recognizing non-native arrivals found through various vectors including incoming ships' ballast water and sediments.

MATERIALS AND METHODS

Books and papers collected from scientific journals were checked for species' lists. As well, various colleagues were contacted and contributed their personal species' lists. Details on the collection of samples are described in the books and papers cited in this manuscript and the names of the colleagues who contributed their lists are listed in the Acknowledgements.

RESULTS

Approximately 893 valid names are listed, representing 160 diatom genera that include 825 species and 69 subspecies level taxa. Of these, some are marine and brackish, likely collected in

situ, but others are known to be from freshwater and most likely introduced into the marine environment from inland sources. Appendix I presents the species' names as they are found originally as well as current accepted names and synonyms. Each species' name has been cited indicating the source of the information and the known geographic location in Canada (East, West or Arctic) of the species is documented.

DISCUSSION

This checklist of species represents the start of documenting species currently observed in North American marine waters, specifically those found on the Canadian marine coasts. The intent of this publication is to make the present data available for examining the composition of diatom species in Canadian waters, both present and from the past. This will provide valuable baseline data on native diatom species and give a greater understanding of the potential for introduction of new organisms from foreign locations that may exist in our coastal regions and establish themselves.

This list may also aid in identifying species that are cryptogenic, that is species that have not been confidently identified as being native or introduced (Carlton 1996). Cryptogenic species are ones that have an unknown origin, or an origin that is not explicitly clear. It seems inevitable that marine organisms that are moved transoceanically into habitats wherever vectors implicated in their transport have gone would be classified as being cryptogenic (Carlton 1996). The understanding that cryptogenic species may be more common than originally thought makes it possible for one to significantly underestimate the impacts of biological invasions on natural and previously invaded communities (Carlton 1996). Neglecting this information may lead to a misleading interpretation of invasion corridors, the types of communities susceptible or resistant to invasions, and invasion success rates (Carlton 1996).

Although we have included the vast majority of papers and books that list species from the North American marine coast, specifically from Canadian waters, we acknowledge that this may not be representative of all the data available and as more research is being conducted more species may be detected.

ACKNOWLEDGEMENTS

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APPENDIX I

Table I : List of species documented from east, west and arctic North American coastal waters, with emphasis on Canadian waters. (BoF= Bay of Fundy, US= United States, pers. comm.= personal communication, (col)= catalogue of life, (ab)= algae base). References outside parentheses are the original papers for reference of species' name while references within parentheses are from additional papers that support the presence of a species.

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Achnanthes bahusiensis (Grunow) Lange-Bertalot	*Achnanthes bahusiensis* (Grunow) Lange-Bertalot (ab)	*Navicula koenigii* Brockmann, *Navicula bahusiensis* (Grunow) Cleve, *Achnanthes pseudosolea* Simonsen	East (BoF)	Ginn (pers. comm.)[1]
Achnanthes bioretii Germain	*Achnanthes bioretii* Germain (ab)	*Navicula rotaeana* var. *excentrica* Grunow, *Navicula vanheurckii* R.M. Patrick	Arctic	Antoniades et al. 2005
Achnanthes brevipes	*Achnanthes brevipes* C. Agardh (ab)	*Cymbosira agardhii* Kützing, *Achnantella brevipes* (Agardh) Gaillon, *Achnanthidium brevipes* (Agardh) Heiberg, *Achnanthidium brevipes* (Agardh) Cleve	East	Brunel 1962 (Bailey 1910, Carver & Mallet 2002)
Achnanthes brevipes var. *intermedia*	*Achnanthes brevipes* var. *intermedia* (Kützing) Cleve (ab)	*Achnanthes intermedia* Kützing, *Achnanthes subsessilis* Kützing	East	Brunel 1962
Achnanthes broenlundensis Foged	*Achnanthes broenlundensis* Foged (ab)		Arctic	Antoniades et al. 2005
Achnanthes chlidanos Hohn & Hellerman	*Psammothidium chlidanos* (M.H. Hohn & Hellerman) Lange-Bertalot (ab)	*Achnanthes chlidanos* M.H. Hohn & Hellerman	Arctic	Antoniades et al. 2005
Achnanthes flexella Kützing	*Eucocconeis flexella* (Kützing) Meister (ab)	*Achnanthes flexella* (Kützing) Brun	Arctic	Antoniades et al. 2005

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Achnanthes hauckiana var. rostrata Shulz	*Achnanthes hauckiana* var. *rostrata* Schulz (col)		East	Zwicker 1998
Achnanthes helvetica Hustedt	*Achnanthes helvetica* (Hustedt) Lange-Bertalot (ab)	*Achnanthes austriaca* var. *ventricosa* Krasske, *Achnanthes austriaca* var. *helvetica* Hustedt	Arctic	Antoniades et al. 2005
Achnanthes kriegeri Krasske	*Achnanthes kriegeri* Krasske (ab)		West (Effingham Inlet)	Hay et al. 2003
Achnanthes kryophila Petersen	*Achnanthes kryophila* J.B. Petersen (ab)	*Navicula seminulum* var. *intermedia* Hustedt, *Achnanthes plitvicensis* Hustedt	Arctic	Antoniades et al. 2005
Achnanthes laevis Østrup	*Achnanthes laevis* Østrup (ab)		Arctic	Antoniades et al. 2005
Achnanthes longipes Agardh	*Achnanthes longipes* Agardh (ab)		East/West	Linkletter et al. 1977 (Bailey 1910, 1913)
Achnanthes marginulata Grunow in Cleve & Grunow	*Achnanthes marginulata* Grunow in Cleve & Grunow (ab)		Arctic	Antoniades et al. 2005
Achnanthes minutissima Kützing	*Achnanthidium minutissimum* (Kützing) Czarnecki (ab)	*Achnanthes minutissima* Kützing	West (Effingham Inlet)/Arctic/East	Hay et al. 2003 (Antoniades et al. 2005, Cattaneo et al. 2004)
Achnanthes petersenii Hustedt	*Rossithidium petersenii* (Hustedt) Round & L. Bukhtiyarova ex Aboal (ab)	*Achnanthes petersenii* Hustedt, *Achnanthes hustedtii* Bily & Marvan, *Achnanthes jakovlejevicii* Hustedt, *Achnanthes kryophila* var. *densestriata* Hustedt, *Achnanthes parallela* J.R. Carter, *Achnanthes procera* Hustedt, *Achnanthes pusilla* var. *petersenii* (Hustedt) Lange-Bertalot, *Achnanthes sonyda* B. Hartley, *Navicula densestriata* Hustedt, *Achnanthes grubei* Simonsen	Arctic	Antoniades et al. 2005

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Achnanthes rossii Hustedt	*Achnanthes rossii* Hustedt (ab)	*Achnanthes cassida* Carter	Arctic	Antoniades et al. 2005
Achnanthes spp.	*Achnanthes* spp.		East/Arctic	Bates & Strain 2006 (Booth & Horner 1997)
Achnanthes subsessilis K.	*Achnanthes brevipes* var. *intermedia* (Kützing) Cleve	*Achnanthes subsessilis* Kützing	East	Bailey 1910 (Bailey 1913)
Achnanthes taeniata	*Achnanthes taeniata* Grunow (ab)	*Achnanthes taeniata* var. *hyperborea* Grunow, *Achnanthes hyperborea* (Grunow) Grunow	East (BoF)/Arctic	Carver & Mallet 2002 (Bursa 1963, Gran & Braarud 1935)
Achnanthes ventralis Krasske	*Achnanthes ventralis* (Krasske) Lange-Bertalot (ab)	*Achnanthes kryophila* var. *protracta* Hustedt, *Achnanthes sublaevis* Hustedt, *Navicula ventralis* Krasske, *Achnanthes* sublaevis var. *crassa* C.W. Reimer	Arctic	Antoniades et al. 2005
Achnanthidium biasolettianum (Grunow in Cleve and Grunow) Round & Bukhtiyarova	*Achnanthidium biasolettianum* (Grunow) F.E. Round & L. Bukhtiyarova (ab)	*Achnanthidium biasolettianum* (Grunow) Lange-Bertalot, *Achnanthidium biasolettianum* (Kützing) Bukhtiyarova, *Microneis biasolettiana* (Kützing) Meister, *Microneis biasolettiana* (Kützing) Cleve, *Achnanthes biasolettiana* Grunow, *Falcatella biasolettiana* (Kützing) Rabenhorst, *Synedra biasolettiana* Kützing	West (Effingham Inlet)	Hay et al. 2003
Actinocyclus curvatulus Janisch	*Actinocyclus curvatulus* Janisch	*Actinocyclus subocellatus* (Grunow) Rattray, *Coscinodiscus curvatulus* var. *subocellatus* Grunow	West/Arctic	Sancetta & Calvert 1988 (Lovejoy et al. 2002, McQuoid & Hobson 2001)
Actinocyclus ehrenbergi Ralfs	*Actinocyclus octonarius* Ehrenberg (ab)	*Actinocyclus ehrenbergii* Ralfs	East	Gran & Braarud 1935
Actinocyclus sp.	*Actinocyclus* sp.		Arctic	Riedel et al. 2003
Actinocyclus tenuissimus	*Actinocyclus tenuissimus* Cleve		East/Arctic	Bérard-Therriault et al. 1999 (Lovejoy et al. 2002)

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Actinocyclus octonarius Ehrenberg	*Actinocyclus octonarius* Ehrenberg (ab)	*Actinocyclus ehrenbergii* Ralfs	West	Hobson 2009
Actinoptychus senarius Ehrenberg	*Actinoptychus senarius* (Ehrenberg) Ehrenberg (ab)	*Actinoptychus undulatus* Bailey ex Hustedt, *Actinocyclus senarius* Ehrenberg, *Actinocyclus undulatus* J.W. Bailey, *Actinocyclus undulatus* Kützing, *Actinoptychus undulatus* (J.W. Bailey) Ralfs	East/West	Horner et al. 2005 (Linkletter et al. 1977, Sancetta & Calvert 1988, McQuoid & Hobson 2001, Hay et al. 2003)
Actinoptychus sp.	*Actinoptychus* sp.		Arctic	Bursa 1963
Actinoptychus splendens (Shadbolt) Ralfs	*Actinoptychus splendens* (Shadbolt) Ralfs ex Pritchard (ab)	*Actinoptychus halionyx* Grunow, *Actinoptychus quatuordenarius* Ehrenberg, *Actinosphaenia splendens* Shadbolt	West (US)/East	Cupp 1943 (McQuoid & Hobson 2001, Carver & Mallet 2002)
Actinoptychus undulatus (Bailey) Ralfs	*Actinoptychus senarius* (Ehrenberg) Ehrenberg (ab)	*Actinoptychus undulatus* (J.W. Bailey) Ralfs	East/West (US)/Arctic	Cupp 1943 (Bailey 1910, 1913, Bursa 1963, Gran & Braarud 1935)
Actinoptychus vulgaris Schumann	*Actinoptychus vulgaris* Schumann (ab)		West (Effingham Inlet)	Hay et al. 2003
Amphipleura pellucida Kutz.	*Amphipleura pellucida* (Kützing) Kützing (ab)	*Berkeleya pellucida* (Kützing) Giffen, *Carrodoria pellucida* (Kützing) Kuntze, *Aulacocystis pellucida* (Kützing) Hassall, *Navicula pellucida* (Kützing) Ehrenberg, *Frustulia pellucida* Kützing	East	Bailey 1913
Amphipleura sigmoidea W. Sm.	*Amphipleura sigmoidea* W. Smith		East	Bailey 1910 (Bailey 1913)
Amphiprora alata Kutz.	*Entomoneis alata* (Ehrenberg) Ehrenberg	*Amphiprora alata* (Ehrenberg) Kützing	East	Bailey 1910 (Bailey 1913)
Amphiprora gigantea var. *sulcata* (O'Meara) Cleve	*Amphiprora gigantea* var. *sulcata* (O'Meara) Cleve (ab)		West (US)	Cupp 1943
Amphiprora hyperborea Gran	*Amphiprora hyperborea* (Grunow) Gran (col)	*Amphiprora paludosa* var. *hyperborea* Grunow	Arctic	Bursa 1963 (Booth & Horner 1997)
Amphiprora paludosa	*Amphiprora paludosa* W. Smith		East	Brunel 1962

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Amphitetras sp.	*Amphitetras* sp.		West	Hobson 2009 (McQuoid & Hobson 2001)
Amphora sp.	*Amphora* sp.		East	Brunel 1962
Amphora spp.	*Amphora* spp.		Arctic/West	Lovejoy et al. 2002 (McQuoid & Hobson 2001)
Amorpha affinis Kutz.	*Amphora libyca* Ehrenberg (ab)	*Amphora affinis* Kützing	East	Bailey 1913
Amphora coffeaeformis (C.A. Agardh) Kützing	*Amphora aponina* Kützing (ab)	*Frustulia coffeaeformis* C. Agardh	West (Effingham Inlet)	Hay et al. 2003
Amphora costata W. S.	*Amphora costata* W. Smith (ab)		East	Bailey 1913
Amphora helenensis Giffen	*Amphora helenensis* M.H. Giffen (ab)		West (Effingham Inlet)	Hay et al. 2003
Amphora inariensis Krammer	*Amphora inariensis* Krammer (ab)		Arctic	Antoniades et al. 2005
Amphora laevis var. *laevissima*	*Amphora laevis* var. *laevissima* (Gregory) Cleve		Arctic	Riedel et al. 2003 (Lovejoy et al. 2002)
Amphora libyca Ehrenberg	*Amphora libyca* Ehrenberg (ab)	*Amphora copulata* (Kützing) Schoeman & Archibald, *Amphora ovalis* var. *libyca* (Ehrenberg) Cleve, *Amphora ovalis* var. *affinis* (Kützing) van Heurck, *Amphora affinis* Kützing, *Frustulia copulata* Kützing	Arctic	Antoniades et al. 2005
Amphora obtecta H.L.S.	*Amphora obtecta* J.W. Bailey (ab)		East	Bailey 1913
Amphora ovalis Kutz.	*Amphora ovalis* (Kützing) Kützing (ab)	*Amphora amphora* (C.G. Ehrenberg) J. Pantocsek, *Amphora ocellata* Ehrenberg, *Navicula amphora* Ehrenberg, *Frustulia ovalis* Kützing	East (BoF)/West	Bailey 1913 (McQuoid & Hobson 2001, Bailey 1910)

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Amphora pediculus (Kützing) Grunow ex Schmidt	*Amphora pediculus* (Kützing) Grunow ex A. Schmidt (ab)	*Amphora ovalis* var. *pediculus* (Kützing) Pero, *Encyonema pediculus* (Kützing) H. Peragallo, *Amphora ovalis* var. *pediculus* (Kützing) van Heurck, *Cymbella caespitosum* var. *pediculus* (Kützing) Brun, *Cymbella pediculus* Kützing, *Amphora ovalis* var. *pediculus* Kützing	Arctic	Antoniades et al. 2005
Amphora robusta	*Amphora robusta* Gregory (ab)		East	Carver & Mallet 2002
Amphora spitzbergensis VanLandingham	*Amphora spitzbergensis* VanLandingham (ab)		Arctic	Antoniades et al. 2005
Amphora sp.	*Amphora* sp.		East	Brunel 1962
Amphora spp.	*Amphora* spp.		East	Martin (pers. comm.)[2]
Arachnoidiscus ehrenbergii Bailey ex Ehrenberg	*Arachnoidiscus ehrenbergii* Bailey ex Ehrenberg (ab)		West (US)	Cupp 1943
Arcocellulus cornucervis	*Arcocellulus cornucervis* G.R. Hasle, H.A. von Stosch & E.E. Syvertsen (ab)		East/Arctic	Bérard-Therriault et al. 1999 (Lovejoy et al. 2002)
Asterionella formosa	*Asterionella formosa* Hassall (ab)	*Asterionella gracillima* var. *formosa* (Hassall) Wislouch	East	Cattaneo et al. 2004
Asterionella gracillima Heib.	*Asterionella gracillima* (Hantzsch) Heiberg (ab)		Arctic/East	Bursa 1963 (Gran & Braarud 1935)
Asterionella japonica	*Asterionellopsis glacialis* (F. Castracane) F.E. Round		East	Brunel 1962 (Gran & Braarud 1935)
Asterionella kariana Grunow	*Asteroplanus karianus* (Grunow) C. Gardner & R.M. Crawford (ab)	*Asterionella kariana* Grunow, *Asterionellopsis kariana* (Grunow) F.E. Round	Arctic/East	Bursa 1963 (Gran & Braarud 1935)
Asterionellopsis glacialis	*Asterionellopsis glacialis* (F. Castracane) F.E. Round	*Asterionella glacialis* F. Castracane, *Asterionella japonica* Cleve	East/West	Bérard-Therriault et al. 1999 (Horner 2002)
Asterionellopsis kariana	*Asteroplanus karianus* (Grunow) C. Gardner & R.M. Crawford (ab)		East	Carver & Mallet 2002
Asterionellopsis socialis (Lewin & Norris) Round	*Asterionella socialis* Lewin & Norris (ab)		West	Horner (pers. comm.)[3]
Asterolampra sp.	*Asterolampra* sp.		Arctic	Bursa 1963

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Asterolampra marylandica Ehrenberg	*Asterolampra marylandica* Ehrenberg (ab)	*Asterolampra vanheurckii* Brun	West (US)/East	Cupp 1943
Asteromphalus flabellatus	*Asteromphalus flabellatus* (Brébisson) Greville (ab)	*Spatangidium flabellatum* Brébisson	East	Carver & Mallet 2002
Asteromphalus heptactis (Brébisson) Ralfs	*Asteromphalus heptactis* (Brébisson) Ralfs (ab)	*Asterolampra areolata* A. Mann, *Asterolampra heptactis* Greville, *Asteromphalus reticulatus* Cleve, *Spatangidium heptactis* Brébisson, *Spatangidium ralfsianum* G. Norman, *Asterolampra ralfsiana* (G. Norman) Grunow	West	Cupp 1943 (Hobson 2009, Sancetta & Calvert 1988, McQuoid & Hobson 2001)
Asteromphalus hyalinus	*Asteromphalus hyalinus* Karsten (ab)		East	Bérard-Therriault et al. 1999
Asteromphalus sarcophagus Wallich	*Asteromphalus sarcophagus* Wallich (ab)		West	Horner (pers. comm.)[3]
Attheya armatus (West) Crawford	*Attheya armata* (T. West) R. M. Crawford (ab)		West	Horner (pers. comm.)[3]
Attheya decora	*Attheya decora* T. West (ab)		East	Bérard-Therriault et al. 1999
Attheya longicornis	*Attheya longicornis* R. M. Crawford & C. Gardner (ab)		East	Martin & LeGresley 2008
Attheya septentrionalis	*Attheya septentrionalis* (Østrup) Crawford (ab)	*Chaetoceros septentrionale* Østrup, *Gonioceros septentrionalis* (Østrup) Round, Crawford & Mann	East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003, Lovejoy et al. 2002, Booth & Horner 1997, Rozanska et al. 2008)
Attheya sp.	*Attheya* sp.		Arctic	Lovejoy et al. 2002
Aulacodiscus kittonii Arnott	*Aulacodiscus kittonii* Arnott ex Ralfs (ab)		West	Horner (pers. comm.)[3]
Aulacoseira ambigua (Grunow) Simonsen	*Aulacoseira ambigua* (Grunow) Simonsen (ab)	*Melosira ambigua* (Grunow) O.F. Muller	East (BoF)	Ginn (pers. comm.)[1]

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Aulacoseria distans (Ehrenb.) Simonsen	*Aulacoseira distans* (Ehrenberg) Simonsen (ab)	*Melosira polymorpha* subsp. *distans* (C.G. Ehrenberg) H. Bethge, *Gallionella distans* Ehrenberg, *Melosira distans* (Ehrenberg) Kützing, *Lysigonium distans* (Ehrenberg) Trevisan, *Lysigonium distans* (Ehrenberg) Kuntze, *Melosira polymorpha* subsp. *distans* (C.G. Ehrenberg) H. Bethge	East	Ginn (pers. comm.)[1]
Aulacoseira granulata	*Aulacoseira granulata* (Ehrenberg) Simonsen (ab)	*Melosira polymorpha* subsp. *granulata* (C.G. Ehrenberg) H. Bethge, *Gaillionella granulata* Ehrenberg, *Melosira granulata* (Ehrenberg) Ralfs, *Melosira punctata* var. *granulata* (Ehrenberg) Cleve & Möller, *Lysigonium granulatum* (Ehrenberg) Kuntze, *Orthosira granulata* (Ehrenberg) Schonfeldt	East (BoF)	Carver & Mallet 2002
Aulacoseira islandica	*Aulacoseira islandica* (O.Müller) Simonsen		East	Bérard-Therriault et al. 1999
Aulacoseira spp.	*Aulacoseira* spp.		West	McQuoid & Hobson 2001
Aulacoseira subarctica (O. Müller) Haworth	*Melosira italica* subsp. *subarctica* O.F. Müller (ab)	*Aulacoseira subarctica* (O. Müller) Haworth	West (Effingham Inlet)	Hay et al. 2003
Auliscus sculptus Ralfs	*Auliscus sculptus* (W. Smith) Ralfs ex Pritchard (ab)	*Auliscus caelatus* J.W. Bailey, *Eupodiscus sculptus* W. Smith	East (BoF)	Bailey 1913 (Lakshminarayana 1983)
Auliscus spinosus Chris.	*Auliscus spinosus* T.Christian (ab)		East	Bailey 1913
Auliscus sp.	*Auliscus* sp.		West	Sancetta & Calvert 1988

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Bacillaria paradoxa Gmel.	*Bacillaria paradoxa* J.F. Gmelin (ab)	*Vibrio paxillifer* O.F. Müller, *Oscillatoria paxillifer* (O.F. Müller) Schrank, *Diatoma paxilliferum* (O.F. Müller) Brébisson, *Nitzschia paxillifer* (O.F. Müller) Heiberg, *Nitzschia paradoxa* (J.F. Gmelin) Grunow, *Oscillatoria paxillifera* (O.F. Müller) Schrank ex Gomont, *Bacillaria paxillifer* (O.F. Müller) T. Marsson, *Homoeocladia paxillifer* (O.F. Müller) Elmore, *Bacillaria paxillifer* (O.F. Müller) Hendey	East	Bailey 1910 (Bailey 1913)
Bacillaria paxillifer (O.F. Müller) Hendey	*Bacillaria paradoxa* J.F. Gmelin (ab)	*Oscillaria paxillifera* (O.F. Müller) Schrank	East/West	Horner et al. 2005 (Martin [pers. comm.][2], Carver & Mallet 2002, McQuoid & Hobson 2001)
Bacteriastrum comosum Pavillard	*Bacteriastrum comosum* Pav. (ab)		West (US)/East	Cupp 1943
Bacteriastrum delicatulum	*Bacteriastrum delicatulum* Cleve (ab)		East/West	Carver & Mallet 2002 (Horner pers. comm.)[3]
Bacteriastrum elongatum Cleve	*Bacteriastrum elongatum* Cl. (ab)		West (US)/East	Cupp 1943 (Carver & Mallet 2002)
Bacteriastrum furcatum	*Bacteriastrum furcatum* Shadbolt (ab)	*Bacteriastrum varians* Lauder	East	Carver & Mallet 2002
Bacteriastrum hyalinum Lauder	*Bacteriastrum hyalinum* Laud. (ab)		West (US)/East	Cupp 1943 (Carver & Mallet 2002)
Bacteriastrum hyalinum var. *princeps* (Castracane) Ikari	*Bacteriastrum hyalinum* var. *princeps* (Castr.) Ikari (ab)		West (US)	Cupp 1943
Bacteriastrum spp.	*Bacteriastrum* spp.		East	Martin (pers. comm.)[2]
Bacterosira bathyomphala	*Bacterosira bathyomphala* (Cleve) E.E. Syvertsen & G.R. Hasle (ab)	*Bacterosira fragilis* (Gran) Gran, *Lauderia fragilis* Gran, *Coscinodiscus bathyomphalus* Cleve	East/Arctic	Bérard-Therriault et al. 1999 (Lovejoy et al. 2002)

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Bacteriosira fragilis Gran	*Bacterosira bathyomphala* (Cleve) E.E. Syvertsen & G.R. Hasle	*Bacterosira fragilis* (Gran) Gran	East (BoF)/Arctic	Linkletter et al. 1977 (Brunel 1962, Bursa 1963, Gran & Braarud 1935, Booth & Horner 1997)
Bellerochea horologicalis	*Bellerochea horologicalis* von Stosch (ab)	*Bellerochea malleus* (Brightwell) Van Heurck	East	Carver & Mallet 2002
Bellerochea malleus	*Bellerochea malleus* (Brightwell) Van Heurck	*Triceratium malleus* Brightwell	East	Bérard-Therriault et al. 1999 (Bursa 1963)
Berkeleya rutilans (Trentepohl) Grunow	*Berkeleya rutilans* (Trentepohl ex Roth) Grunow (ab)	*Carrodoria rutilans* (Roth) Kuntze, *Amphipleura rutilans* (Trentepohl ex Roth) Cleve, *Conferva rutilans* Trentepohl, *Berkeleya dillwynii* var. *rutilans* (Trentepohl ex Roth) Eiben, *Monema rutilans* (Trentepohl ex Roth) Meneghini, *Girodella rutilans* (Roth) Gaillon, *Schizonema rutilans* (Trentepohl ex Roth) Agardh, *Hydrolinum rutilans* (Trentepohl ex Roth) Link, *Bangia rutilans* (Roth) Lyngbye, *Conferva rutilans* Trentepohl ex Roth	East (BoF)	Cardinal et al. 1984
Biddulphia alternans (Bailey) Van Heurck	*Triceratium alternans* J.W. Bailey (ab)	*Biddulphia alternans* (J.W. Bailey) Van Heurck	East/West (US)	Cupp 1943 (Bérard-Therriault et al. 1999, Gran & Braarud 1935)
Biddulphia aurita (Lyng.) Bréb. & God.	*Odontella aurita* (Lyngbye) C.A. Agardh (ab)	*Biddulphia aurita* (Lyngbye) Brébisson	East/Arctic	Rawlence 1987 (Brunel 1962, Fritz 1921, Bursa 1963, Gran & Braarud 1935, Bailey 1910, 1913)
Biddulphia aurita var. *obtusa*	*Biddulphia obtusa* (Kützing) Ralfs (ab)	*Biddulphia aurita* var. *obtusa* (Kützing) Hustedt	East	Brunel 1962
Biddulphia baileyi	*Biddulphia mobiliensis* (J.W. Bailey) Grunow	*Biddulphia baileyi* W. Smith	East	Bailey 1910
Biddulphia dubia (Brightwell) Cleve	*Biddulphia dubia* (T. Brightwell) P.T. Cleve (ab)		West (US)	Cupp 1943
Biddulphia laevis	*Pleurosira laevis (Ehrenberg) Compère (ab)*	*Biddulphia laevis* Ehrenberg	East	Bailey 1913

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Biddulphia longicruris var. *hyalina* (Schröder) Cupp	*Odontella longicruris* (Greville) Hoban (ab)	*Biddulphia longicruris* var. *hyalina* (Schröd.) Cupp	West (US)	Cupp 1943
Biddulphia mobiliensis	*Odontella mobiliensis* (J.W. Bailey) Grunow	*Biddulphia mobiliensis* Grunow, *Zygoceros mobiliensis* J.W. Bailey, *Biddulphia baileyi* W. Smith	East	Fritz 1921 (Bailey 1913)
Biddulphia obtusa	*Biddulphia obtusa* (Kützing) Ralfs (ab)	*Biddulphia roperiana* Greville, *Odontella obtusa* Kützing, *Biddulphia aurita* var. *obtusa* (Kützing) Hustedt	West (US)	Carver & Mallet 2002
Biddulphia pulchella Gray	*Biddulphia pulchella* S.F. Gray		East	Bailey 1910 (Carver & Mallet 2002)
Biddulphia regia (Schulze) Ostenfeld	*Odontella regia* (Schultze) Simonsen	*Denticella regia* Schultze (ab)	East	Gran & Braarud 1935
Biddulphia reticulum	*Biddulphia reticulum* (Ehrenberg) Boyer (ab)	*Triceratium sculptum* Shadbolt, *Triceratium punctatum* Brightwell	East	Carver & Mallet 2002
Biddulphia rhombus (Ehrenberg) W. Smith	*Zygoceros rhombus* Ehrenberg (ab)		West (US)/East	Cupp 1943 (Bailey 1913, Carver & Mallet 2002)
Brachysira vitrea	*Brachysira vitrea* (Grunow) R. Ross (ab)	*Anomoeoneis vitrea* (Grunow) Ross, *Anomoeoneis variabilis* (Ross) Reimer, *Navicula variabilis* R. Ross, *Gomphonema vitreum* Grunow	East	Cattaneo et al. 2004
Brébissonia boeckii (Ehrenberg) Grunow	*Brébissonia boeckii (Ehrenberg) E. O'Meara (ab)*	*Cocconema boeckii* Ehrenberg, *Doryphora boeckii* (Ehrenberg) W.Smith	East	Linkletter et al. 1977 (Bailey 1913, 1910, Cardinal et al. 1984)
Caloneis aerophila Bock	*Caloneis aerophila* Bock (ab)		Arctic	Antoniades et al. 2005
Caloneis hendeyi Lange-Bertalot	*Caloneis hendeyi* Lange-Bertalot (ab)		Arctic	Antoniades et al. 2005
Caloneis schumaniana Grun.	*Caloneis schumaniana* (Grunow) Cleve (ab)		East	Bailey 1913
Caloneis silicula (Ehrenberg) Cleve	*Navicula silicula* Ehrenberg (ab)		Arctic	Antoniades et al. 2005
Caloneis subclevei Krammer	*Caloneis subclevei* Krammer (ab)		Arctic	Antoniades et al. 2005
Campylodiscus cribrosum	*Campylodiscus echineis* Ehrenberg (ab)	*Campylodiscus cribrosus* W. Smith	East	Bailey 1910

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Campylodiscus fastuosus Her.	*Campylodiscus fastuosus* Ehrenberg (ab)	*Campylodiscus thuretii* Brébisson, *Campylodiscus parvulus* W.Smith	East	Bailey 1913
Campylodiscus ralfsii W. Sm.	*Campylodiscus ralfsii* W.Smith (ab)		East	Bailey 1913
Campylodiscus spiralis W. Sm.	*Campylodiscus spiralis* (Kützing) W. Smith (ab)		East	Bailey 1913
Campylodiscus thuretii	*Campylodiscus fastuosus* Ehrenberg (ab)	*Campylodiscus thuretii* Brébisson	East	Brunel 1962
Campyloneis spp.	*Campyloneis* spp.		West	McQuoid & Hobson 1997 (McQuoid & Hobson 2001)
Campylosira cymbelliformis (A. Schmidt) Grunow	*Campylosira cymbelliformis* (A. Schmidt) Grunow ex Van Heurck (ab)	*Synedra cymbelliformis* A.Schmidt (col)	West (US)	Cupp 1943 (Carver & Mallet 2002)
Cerataulina bergoni H. Peragallo	*Cerataulina pelagica* (Cleve) Hendey (ab)	*Cerataulus bergonii* H. Peragallo	East	Gran & Braarud 1935
Cerataulina pelagica (Cleve) Hendey	*Cerataulina pelagica* (Cleve) Hendey (ab)	*Cerataulus bergonii* H. Peragallo, *Cerataulina bergonii* (H. Peragallo) Schütt	East/West	Horner et al. 2005 (Linkletter et al. 1977, Hargraves & Maranda 2002, Bérard-Therriault et al. 1999, Bates & Strain 2006)
Cerataulina spp.	*Cerataulina* spp.		East	Martin (pers. comm.)[2]
Chaetoceros abnormis	*Chaetoceros abnormis* A.I. Proshkina-Lavrenko (ab)		East	Brunel 1962
Chaetoceros affinis Lauder	*Chaetoceros affinis* Lauder (ab)	*Chaetoceros angulatus* Schütt, *Chaetoceros ralfsii* Cleve, *Chaetoceros javanicus* Cleve, *Chaetoceros schuttii* Cleve	East/West	Sancetta & Calvert 1988 (Bérard-Therriault et al. 1999, Brunel 1962, Gran & Braarud 1935)
Chaetoceros affinis var. *circinalis* (Meunier) Hustedt	*Chaetoceros affinis* var. *circinalis* (Meun.) Hust. (ab)		West (US)	Cupp 1943
Chaetoceros affinis var. *willei*	*Chaetoceros willei* Grunow (ab)		East	Bérard-Therriault et al. 1999 (Brunel 1962)
Chaetoceros anastomosans	*Chaetoceros anastomosans* Grunow (ab)		East/West	Brunel 1962 (Horner 2002)
Chaetcoeros angulatus	*Chaetoceros affinis* Lauder (ab)		East	Brunel 1962

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Chaetoceros atlanticus Cleve	*Chaetoceros atlanticus* Cleve (ab)	*Chaetoceros dispar* Castracane, *Chaetoceros polygonus* Schütt, *Chaetoceros audax* Schütt	East/West/Arctic	Cupp 1943 (Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935, Booth & Horner 1997)
Chaetoceros atlanticus form *audax* (Schütt) Gran	*Chaetoceros atlanticus* f. *audax* (Schütt) Gran. (ab)		West (US)	Cupp 1943
Chaetoceros atlanticus var. *skeleton* (Schütt) Hustedt	*Chaetoceros atlanticus* var. *skeleton* (Schütt) Hust. (ab)		West (US)	Cupp 1943
Chaetoceros boreale Bail.	*Chaetoceros borealis* J.W. Bailey (ab)		East	Bailey 1913 (Bailey 1910)
Chaetoceros borealis	*Chaetoceros borealis* J.W. Bailey (ab)		East/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Bursa 1963, Gran & Braarud 1935)
Chaetoceros brevis Schütt	*Chaetoceros brevis* Schütt (ab)		East/West(US)/ Arctic	Cupp 1943 (Bérard-Therriault et al. 1999, Brunel 1962, Lovejoy et al. 2002, Gran & Braarud 1935)
Chaetoceros capreolus	*Chaetoceros capreolus* (Ehrenberg) Bailey (ab)		East	Bailey 1910
Chaetoceros ceratosporus Ostenfeld	*Chaetoceros ceratosporus* Ostenfeld (ab)	*Chaetoceros gracile* Apstein	East	Gran & Braarud 1935
Chaetoceros ceratosporus var. *brachysetus*	*Chaetoceros ceratosporus* var. *brachysetus* J.E.B. Rines & P.E. Hargraves (ab)		East	Bérard-Therriault et al. 1999
Chaetoceros chriophyllum Cast.	*Chaetoceros chriophyllum* Cast. (ab)		East	Bailey 1910
Chaetoceros cinctus Gran	*Chaetoceros cinctus* Gran. (ab)		West (US)/East	Cupp 1943 (Brunel 1962, Gran & Braarud 1935)
Chaetoceros clevei	*Chaetoceros clevei* F. Schütt (ab)		East	Brunel 1962
Chaetoceros coarctatus Lauder	*Chaetoceros coarctatus* Lauder (ab)	*Chaetoceros rude* Cleve	West (US)/East	Cupp 1943 (Brunel 1962)
Chaetoceros compressus	*Chaetoceros compressus* Lauder (ab)	*Chaetoceros contortus* Schütt	East/West/Arctic	Martin (pers. comm.)[2](Brunel 1962, Riedel et al. 2003, Gran & Braarud 1935, Bates & Strain 2006, Johnson 1988)

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Chaetoceros concavicornis Mangin	*Chaetoceros concavicorne* Mangin (ab)	*Chaetoceros criophilus*	East/West/Arctic	Hargraves & Maranda 2002 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935, Booth & Horner 1997, Rozanska et al. 2008)
Chaetoceros concavicornis form *volans* (Schütt) Hustedt	*Chaetoceros concavicornis* form *volans* (Schütt) Hust. (ab)		West (US)	Cupp 1943
Chaetoceros constrictus	*Chaetoceros constrictus* Gran (ab)		East	Brunel 1962 (Gran & Braarud 1935)
Chaetoceros contortus Shütt	*Chaetoceros compressus* Lauder (ab)	*Chaetoceros contortus* Shütt	East/West	Horner et al. 2005 (Bérard-Therriault et al. 1999, Brunel 1962)
Chaetoceros convolutus	*Chaetoceros convolutus* Castracane (ab)		East/West/Arctic	Horner et al. 2005 (Chang et al. 2007, Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935, Rozanska et al. 2008)
Chaetoceros convolutus f. *clavipes*	*Chaetoceros convolutus* f. *clavipes* E. Paasche (ab)		East	Brunel 1962
Chaetoceros convolutus var. *trisetosa*	*Chaetoceros convolutus* f. *trisetosa* J.F. Brunel	*Chaetoceros convolutus* var. *trisetosa*	East/Arctic	Martin (pers. comm.)[2] (Rozanska et al. 2008)
Chaetoceros coronatus	*Chaetoceros coronatus* Gran (ab)		East	Brunel 1962
Chaetoceros costatus Pavillard	*Chaetoceros costatus* Pavillard (ab)	*Chaetoceros adhaerens* Mangin	East/West (US)	Cupp 1943 (Brunel 1962, McQuoid & Hobson 1997)
Chaetoceros crinitus Schütt in Ostenfeld	Chaetoceros crinitus Schütt (ab)		East	Brunel 1962
Chaetoceros criophilus	*Chaetoceros criophilus* Castracane (ab)		East	Brunel 1962
Chaetoceros curvisetus Cleve	*Chaetoceros curvisetus* Cleve (ab)		East (BoF)/West/Arctic	Horner (pers. comm.)[3] (Brunel 1962, Bursa 1963)
Chaetoceros dadayi Pavillard	*Chaetoceros dadayi* Pavillard (ab)		East/West	Horner (pers. comm.)[3] (Brunel 1962)

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Chaetoceros danicus	*Chaetoceros danicus* Cleve (ab)		East/West	Bérard-Therriault et al. 1999 (Brunel 1962, Gran & Braarud 1935, Bates & Strain 2006, Horner 2002)
Chaetoceros debilis Cleve	*Chaetoceros debilis* Cleve (ab)	*Chaetoceros vermiculatum* Schütt	East/West/Arctic	Hargraves & Maranda 2002 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935, McQuoid & Hobson 1997)
Chaetoceros decipiens	*Chaetoceros decipiens* Cleve (ab)	*Chaetoceros grunowii* Schütt	East/West/Arctic	Bailey 1913 (Bailey 1910, Linkletter et al. 1977, Bérard-Therriault et al. 1999, Brunel 1962, Fritz 1921, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935, Booth & Horner 1997)
Chaetoceros decipiens form *singularis* Gran	*Chaetoceros decipiens* form *singularis* Gran (ab)		West (US)	Cupp 1943
Chaetoceros delicatulus	*Chaetoceros delicatulus* C.E.H. Ostenfeld (ab)		East	Brunel 1962
Chaetoceros densus	*Chaetoceros densus* Cleve	*Chaetoceros borealis* var. *densum* Cleve	East/West/Arctic	Sancetta & Calvert 1988 (Brunel 1962, Bursa 1963, Gran & Braarud 1935)
Chaetoceros diadema (Ehrenberg) Gran	*Chaetoceros diadema* (Ehrenberg) Gran	*Chaetoceros paradoxus* Peragallo, *Chaetoceros groenlandicus* Cleve, *Chaetoceros distans* var. *subsecundus* Grunow ex Van Heurck, *Syndendrium diadema* Ehrenberg	East/West/Arctic	Sancetta & Calvert 1988 (Bérard-Therriault et al. 1999, Brunel 1962, Fritz 1921, Lovejoy et al. 2002, Gran & Braarud 1935, McQuoid & Hobson 1997)
Chaetoceros dichaeta Ehrenberg	*Chaetoceros dichaetus* Ehrenberg (ab)	*Chaetoceros janischianus* Castracane, *Chaetoceros remotus* Cleve & Grunow, *Chaetoceros distans* Cleve	West (US)	Cupp 1943 (Brunel 1962)

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Chaetoceros dicladia	*Chaetoceros dicladia* F.S. Castracane degli Angelminelli (ab)		East	Bailey 1910
Chaetoceros didymus Ehrenberg	*Chaetoceros didymus* C.G. Ehrenberg	*Chaetoceros didymus* f. *singularis* H. *Takano*, *Chaetoceros didymus var. anglica* (Grunow) Gran	East/West/Arctic	Sancetta & Calvert 1988 (Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963,Gran & Braarud 1935, Bates & Strain 2006, McQuoid & Hobson 1997)
Chaetoceros didymus var. *anglica* (Grunow) Gran	*Chaetoceros didymus* Ehrenberg (ab)	*Chaetoceros didymus* var. *anglica* (Grunow) Gran	West (US)	Cupp 1943
Chaetoceros didymus var. *protuberans* (Lauder) Gran and Yendo	*Chaetoceros protuberans* Lauder (ab)	*Chaetoceros didymus* var. *protuberans* (Lauder) Gran and Yendo	West (US)	Cupp 1943
Chaetoceros difficilis Cleve	*Chaetoceros difficilis* Cl. (ab)		West (US)/East	Cupp 1943 (Brunel 1962)
Chaetoceros dipyrenops	*Chaetoceros dipyrenops* A.F. Meunier (ab)		East	Brunel 1962
Chaetoceros diversus Cleve	*Chaetoceros diversus* Cleve (ab)	*Chaetoceros laeve* G. Leuduger-Fortmorel	East/West (US)	Cupp 1943 (Carver & Mallet 2002)
Ch. eibeni Grunow	*Chaetoceros eibenii* (Grunow) Meunier (ab)	*Chaetoceros paradoxum* var. *eibenii* (Grunow) Van Heurck	Arctic	Bursa 1963
Chaetoceros furcellatus Bailey	*Chaetoceros furcellatus* Bailey (ab)		East/Arctic	Martin (pers. comm.)[2](Bérard-Therriault et al. 1999, Riedel et al. 2003, Bursa 1963, Gran & Braarud 1935, Booth & Horner 1997)
Chaetoceros gracilis Schütt	*Chaetoceros neogracile* VanLandingham (ab)	*Chaetoceros gracilis* Schütt	West (US)	Cupp 1943 (Brunel 1962, Bursa 1963)
Chaetoceros holsaticus Schütt	*Chaetoceros holsaticus* Schütt (ab)	*Chaetoceros balticus* Cleve	West (US)/East	Cupp 1943 (Bérard-Therriault et al. 1999, Brunel 1962)
Chaetoceros ingolfianus	*Chaetoceros ingolfianus* Ostenfeld		East/Arctic	Bates & Strain 2006 (Rozanska et al. 2008)
Chaetoceros karianus Grunow	*Chaetoceros karianus* Grunow (ab)		East/Arctic	Martin (pers. comm.)[2] (Bérard-Therriault et al. 1999, Brunel 1962, Lovejoy et al. 2002)

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Chaetoceros laciniosus Grunow	*Chaetoceros laciniosus* Schütt (ab)		East/West/Arctic	Horner et al. 2005 (Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935)
Chaetoceros laevis Leuduger-Fortmorel	*Chaetoceros laevis* Leud.-Fort (ab)		East/West (US)	Cupp 1943 (Carver & Mallet 2002)
Chaetoceros lauderi Ralfs	*Chaetoceros lauderi* Ralfs (ab)	*Chaetoceros weissflogii* Schutt	West (US)	Cupp 1943 (Brunel 1962)
Chaetoceros lorenzianus Grunow	*Chaetoceros lorenzianus* Grunow (ab)	*Chaetoceros cellulosus* Launder	East/West/Arctic	Sancetta & Calvert 1988 (Bérard-Therriault et al. 1999, Bursa 1963, Bates & Strain 2006)
Chaetoceros lorenzianus f. *forceps*	*Chaetoceros lorenzianus* var. *forceps* A.F. Meunier (ab)		East	Brunel 1962
Chaetoceros messanensis Castracane	*Chaetoceros messanense* Castracane (ab)	*Chaetoceros furca* Cleve	West (US)/East	Cupp 1943 (Brunel 1962, Carver & Mallet 2002)
Chaetoceros mitra	*Chaetoceros mitra* (J.W. Bailey) Cleve (ab)	*Dicladia mitra* J.W. Bailey, *Dicladia groenlandica* Cleve	East/Arctic	Brunel 1962 (Bursa 1963, Lovejoy et al. 2002)
Chaetoceros muelleri	*Chaetoceros muelleri* E.J.		East	Brunel 1962 (Johnson 1988)
Chaetoceros paulsenii	*Chaetoceros paulsenii* Ostenfeld (ab)		East	Brunel 1962
Chaetoceros pavillardii Ikari	*Chaetoceros pavillardii* J. Ikari (ab)		West	Sancetta & Calvert 1988
Chaetoceros pelagicus Cleve	*Chaetoceros pelagicus* Cl. (ab)		West (US)	Cupp 1943 (Brunel 1962)
Chaetoceros perpusillus Cleve	*Chaetoceros perpusillus* Cl. (ab)		West(US)/East	Cupp 1943 (Brunel 1962)
Chaetoceros peruvianus Brightwell	*Chaetoceros peruvianus* Brightwell (ab)	*Chaetoceros chilensis* Krasske, *Chaetoceros convexicornis* Mangin, *Chaetoceros peruvianum* var. *currens* Peragallo, *Chaetoceros peruvio-atlanticum* Karsten	West (US)/East	Cupp 1943 (Brunel 1962, Carver & Mallet 2002)
Chaetoceros peruvianus form *gracilis* (Schröder) Hustedt	*Chaetoceros peruvianus* var. *gracilis* J.L.B. Schröder (ab)		West (US)	Cupp 1943
Chaetoceros procerus	*Chaetoceros procerus* F. Schütt (ab)		East	Brunel 1962
Chaetoceros pseudocrinitus	*Chaetoceros pseudocrinitus* Ostenfeld (ab)		East	Brunel 1962 (Gran & Braarud 1935)

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Chaetoceros pseudocurvisetus Mangin	*Chaetoceros pseudocurvisetus* Mang. (ab)		East/West (US)	Cupp 1943
Chaetoceros radicans Schütt	*Chaetoceros radicans* Schütt (ab)	*Chaetoceros scolopendra* Cleve	East/West/Arctic	Horner et al. 2005 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, Lovejoy et al. 2002, Gran & Braarud 1935, McQuoid & Hobson 1997)
Chaetoceros ralfsii	*Chaetoceros affinis* Lauder (ab)	*Chaetoceros ralfsii* Cleve	East	Brunel 1962
Chaetoceros rigidus	*Chaetoceros rigidus* Ostenfeld (ab)		East	Brunel 1962
Chaetoceros rostratus	*Chaetoceros rostratus* Lauder (ab)		East	Brunel 1962 (Carver & Mallet 2002)
Chaetoceros saltans	*Chaetoceros saltans* P.T. Cleve (ab)		East	Brunel 1962
Chaetoceros schüttii	*Chaetoceros affinis* Lauder (ab)	*Chaetoceros schuttii* Cleve	East	Brunel 1962
Chaetoceros scolopendra	*Chaetoceros radicans* Schütt (ab)	*Chaetoceros scolopendra* Cleve	East	Brunel 1962
Chaetoceros seiracanthus	*Chaetoceros seriacanthus* Gran (ab)		East	Brunel 1962
Ch. septentrionalis	*Attheya septentrionalis* (Østrup) Crawford (ab)		Arctic	Bursa 1963
Chaetoceros similis Cleve	*Chaetoceros similis* Cleve (ab)		East/West/Arctic	Horner et al. 2005 (Bérard-Therriault et al. 1999, Gran & Braarud 1935, Rozanska et al. 2008)
Chaetoceros simplex	*Chaetoceros simplex* Ostenfeld (ab)		East/Arctic	Martin (pers. comm.)[2] (Rafuse [pers.comm.][4], Bérard-Therriault et al. 1999, Brunel 1962, Gran & Braarud 1935, Rozanska et al. 2008)
Chaetoceros sociale	*Chaetoceros sociale* Lauder (ab)		East	Fritz 1921

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Chaetoceros socialis Lauder	*Chaetoceros socialis* Lauder (ab)		East/West/Arctic	Horner et al. 2005 (Chang et al. 2007, Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, Riedel et al. 2003, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935, Bates & Strain 2006, Booth & Horner 1997)
Chaetoceros spp.	*Chaetoceros* spp.		East	Bates & Strain 2006
Chaetoceros subsecundus	*Chaetoceros diadema* (Ehrenberg) Gran (Tomas 1997)		East	Brunel 1962 (Bursa 1963)
Chaetoceros subtilis	*Chaetoceros subtilis* Cleve (ab)		East/Arctic/	Bérard-Therriault et al. 1999
Chaetoceros tenuissimus	*Chaetoceros tenuissimus* A.F. Meunier (ab)		East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003)
Chaetoceros teres	*Chaetoceros teres* Cleve (ab)		East/West/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935, Bates & Strain 2006, Horner et al. 2005)
Chaetoceros tetrastichon	*Chaetoceros tetrastichon* Cleve		East/West (US)	Brunel 1962 (Cupp 1943)
Chaetoceros tortilisetus	*Chaetoceros tortilisetus* L.A. Mangin		East	Brunel 1962
Chaetoceros tortilisetus	*Chaetoceros tortissimus* Gran (ab)		East	Brunel 1962
Chaetoceros tortissimus	*Chaetoceros tortissimus* Gran (ab)		East/West	Carver & Mallet 2002 (Cupp 1943)
Chaetoceros uruguayensis	*Chaetoceros uruguayensis* F.C. Müller Melchers (ab)		East	Brunel 1962
Chaetoceros vistulae	*Chaetoceros vistulae* C. Apstein (ab)		East	Brunel 1962
Chaetoceros wighamii	*Chaetoceros wighamii* Brightwell (ab)	*Chaetoceros bottnicus* Cleve, *Chaetoceros biconcavus* Gran	East/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Lovejoy 2002, Rozanska et al. 2008)
Chaetoceros willei	*Chaetoceros willei* Grunow (ab)	*Chaetoceros affinis* var. *willei* (Gran) Hustedt	East	Hargraves & Maranda 2002 (Martin [pers. comm.][2], Bérard-Therriault et al. 1999, Brunel 1962, Linkletter et al. 1977)

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Chaetoceros sp.	*Chaetoceros* sp.		East/Arctic	Martin (pers. comm.)[2] (Fritz 1921 & Bursa 1963)
Chaetoceros spp. (phaeoceros)	*Chaetoceros* spp. (phaeoceros)		East	Martin (pers. comm.)[2]
Chaetoceros subsecundus (Grunow) Hustedt	*Chaetoceros subsecundus* (Grunow ex Van Heurck) Hustedt (ab)	*Chaetoceros distans* var. *subsecundus* Grunow ex Van Heurck	West (US)	Cupp 1943
Chaetoceros vanheurckii Gran	*Chaetoceros vanheurckii* Gran (ab)		East/West (US)	Horner et al. 2005 (Cupp 1943, Sancetta & Calvert 1988, McQuoid & Hobson 1997)
Chaetoceros vistulae Apstein	*Chaetoceros vistulae* Apstein (ab)		West (US)	Cupp 1943
Chaetoceros wighamii Brightwell	*Chaetoceros wighamii* Brightwell (ab)	*Chaetoceros bottnicus* Cleve, *Chaetoceros biconcavus* Gran	East/West (US)	Cupp 1943 (Bailey 1913)
Climacodium frauenfeldianum Grunow	*Chaetoceros frauenfeldianum* Grunow (ab)		East/West (US)	Cupp 1943 (Carver & Mallet 2002)
Climacosphenia elongata	*Climacosphenia elongata* Mereschkowsky (ab)		East	Bailey 1913
Climacosphenia moniligera Ehrenberg	*Climacosphenia moniligera* Ehr. (ab)		West (US)	Cupp 1943
Cocconeis costata Gregory	*Cocconeis costata* Gregory (ab)		West (Effingham Inlet)	Hay et al. 2003
Cocconeis decipiens Cleve	*Cocconeis decipiens* P.T. Cleve (ab)		West	McQuoid & Hobson 2001
Cocconeis diminuta Pentoscek, Kieselalg. Balat	*Cocconeis neodiminuta* Krammer (ab)	*Cocconeis diminuta* Pantocsek	East	Johnson 1988
Cocconeis distans Gregory	*Cocconeis distans* Gregory (ab)	*Cocconeis granulifera* Greville, *Cocconeis villosa* H. Peragallo	East (BoF)	Rawlence 1987
Cocconeis neodiminuta var. *marina* (Krammer) de Stefano, Marino & Mazzella	*Cocconeis neodiminuta* var. *marina* (Krammer) de Stefano, Marino & Mazzella (ab)		West (Effingham Inlet)	Hay et al. 2003
Cocconeis pediculus	*Cocconeis pediculus* Ehrenberg (ab)	*Encyonema caespitosum* var. *pediculus* (Ehrenberg) De Toni, *Cocconeis communis* f. *pediculus* (Ehrenberg) Chmielevski	East	Bailey 1910

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Cocconeis placentula	*Cocconeis placentula* Ehrenberg (ab)	*Cocconeis pediculus* var. *placentula* (C.G. Ehrenberg) A. Grunow, *Cocconeis communis* f. *placentula* (Ehrenberg) Chmielevski	East/West (Effingham Inlet)	Hay et al. 2003 (Bailey 1913, Bailey 1910, Zwicker 1998)
Cocconeis placentula var. *euglyppta* (Ehr.) Cl.	*Cocconeis placentula var. euglypta* (Ehrenberg) Cleve	*Cocconeis euglypta* Ehrenberg	East	Zwicker 1998
Cocconeis placentula var. *lineata* (Ehr.) V.H.	*Cocconeis placentula* var. *lineata* (Ehrenberg) P. Cleve (col)	*Cocconeis lineata* Ehrenberg	East	Zwicker 1998
Cocconeis placentula Ehr. v. *placentula*	*Cocconeis placentula* Ehr. v. *placentula* (ab)	*Cocconeis elongata* Ehrenberg, *Cocconeis punctata* Ehrenberg, *Cocconeis pumila* Kützing	East	Rawlence 1987
Cocconeis scutellum Ehrenberg	*Cocconeis scutellum* Ehrenberg (ab)		East/West (Effingham Inlet)/Arctic	Hay et al. 2003 (Linkletter et al. 1977, Zwicker 1998, Johnson 1988, Bailey 1910, Bailey 1913)
Cocconeis scutellum var. *parva* (Grunow in Van Heurck) Cleve	*Cocconeis scutellum* var. *parva* (Grunow in Van Heurck) Cleve (ab)		West (Effingham Inlet)	Hay et al. 2003
Cocconeis spp.	*Cocconeis* spp.		West	Hobson 2009 (McQuoid & Hobson 1997, McQuoid & Hobson 2001)
Cocconeis stauroneiformis (Rabenhorst) Okuno	*Cocconeis stauroneiformis* (Rabenhorst) Okuno (ab)	*Cocconeis scutellum* var. *stauroneiformis* Van Heurck	West (Effingham Inlet)	Hay et al. 2003
Cocconema cistula	*Cocconema cistula* (Ehrenberg) Ehrenberg (ab)		East	Bailey 1913
Cocconema lanceolatum	*Cymbella lanceolata* (Ehrenberg) Kirchner (ab)	*Cocconema lanceolatum* Ehrenberg	East	Bailey 1910
Colletonema subcohaerens	*Colletonema subcohaerens* Thwaites (ab)		East	Bailey 1913
Corethron criophilum	*Corethron criophilum* Castracane (ab)	*Corethron hystrix* Hensen	East/West	Chang et al. 2007
Corethron hystrix Hensen	*Corethron criophilum* Castracane (ab)		East	Gran & Braarud 1935

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Coscinodiscus asteromphalus	*Coscinodiscus asteromphalus* Ehrenberg (ab)	*Coscinodiscus asteromphalus* var. *conspicua* Grunow ex Van Heurck, *Coscinodiscus radiatus* var. *asteromphalus* (Ehrenberg) Ehrenberg, *Coscinodiscus asteromphalus* var. *genuina* Grunow	East	Bailey 1913 (Brunel 1962, Lovejoy 2002)
Coscinodiscus asteromphalus var. *centralis*	*Coscinodiscus centralis* Ehrenberg (ab)	*Coscinodiscus asteromphalus* var. *centralis* Grunow	East	Brunel 1962
Coscinodiscus centralis (Ehrenberg)	*Coscinodiscus oculus-iridis* var. *tenuistriata* Grunow (ab)	*Coscinodiscus asteromphalus* var. *centralis* Grunow	East/West/Arctic	Horner et al. 2005 (Hargraves & Maranda 2002, Bérard-Therriault et al. 1999, Brunel 1962, Lovejoy et al. 2002)
Coscinodiscus centralis var. *pacifica* Gran & Angst	*Coscinodiscus centralis* var. *pacifica* Gran & Angst (ab)		East/West (US)	Cupp 1943 (Brunel 1962)
Coscinodiscus concinnus	*Coscinodiscus concinnus* W. Smith (ab)		East/West/Arctic	Hargraves & Maranda 2002 (Bailey 1913, Bérard-Therriault et al. 1999, Bursa 1963)
Coscinodiscus curvatulus Grunow	*Coscinodiscus curvatulus* Grunow ex A. Schmidt (ab)		West (US)	Cupp 1943
Coscinodiscus eccentricus	*Thalassiosira eccentrica* (Ehrenberg) Cleve (ab)	*Coscinodiscus heliozoides* Siddall, *Coscinodiscus eccentricus* Ehrenberg	East	Bailey 1913
Coscinodiscus excentricus Ehrenberg	*Coscinodiscus excentricus* Ehr. (ab)		East/West (US)/Arctic	Cupp 1943 (Bailey 1913, Brunel 1962, Bursa 1963, Gran & Braarud 1935)
Coscinodiscus fasciculatus O'Me	*Coscinodiscus normanii* Gregory ex Greville (ab)	*Coscinodiscus fasciculatus* Schmidt	East (BoF)	Linkletter et al. 1977
Coscinodiscus gigas Ehrenberg	*Coscinodiscus gigas* Ehrenberg (ab)		West	Sancetta & Calvert 1988 (McQuoid & Hobson 2001)
Coscinodiscus granii	*Coscinodiscus granii* Gough (ab)		East/West/Arctic	Martin (pers. comm.)[2] (Riedel et al. 2003, Bursa 1963, McQuoid & Hobson 2001)
Coscinodiscus griseus	*Coscinodiscus griseus* R.K. Greville (ab)		East	Bailey 1910
C. lineatus Ehrenberg	*Thalassiosira leptopus* (Grunow ex Van Heurck) Hasle & G. Fryxell (ab)	*Coscinodiscus lineatus* Ehrenberg, *Coscinodiscus ehrenbergii* O'Meara	Arctic	Bursa 1963

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Coscinodiscus marginatus K.B.	*Coscinodiscus marginatus* Ehrenberg (ab)	*Coscinodiscus limbatus* Ehrenberg, *Coscinodiscus fimbriatus-limbatus* Ehrenberg	East/West/Arctic	Bailey 1913 (Bailey 1910, Brunel 1962, Bursa 1963)
Coscinodiscus minutus	*Coscinodiscus minutus* Kützing (ab)		East	Bailey 1913
Coscinodiscus neoradiatus	*Coscinodiscus neoradiatus* A. Cleve-Euler (ab)		East	Brunel 1962
Coscinodiscus nitidus Gregory	*Coscinodiscus nitidus* Greg. (ab)		East/West (US)	Cupp 1943 (Bailey 1913)
Coscinodiscus oculus-iridis	*Coscinodiscus oculus-iridis* (Ehrenberg) Ehrenberg (ab)	*Coscinodiscus radiatus* var. *oculus-iridis* Ehrenberg, *Coscinodiscus oculus-iridis* var. *genuina* Grunow, *Coscinodiscus oculus-iridis* var. *typicus* Cleve-Euler	East/West	Bailey 1910
Coscinodiscus omphalanthus Ehr.	*Coscinodiscus omphalanthus* Ehrenberg (ab)		East	Bailey 1913
Coscinodiscus pellucida	*Coscinodiscus pellucidus* A. Grunow (ab)		East	Bailey 1910
Coscinodiscus perforatus Ehrenberg	*Coscinodiscus perforatus* Ehrenberg (ab)		East/West	Cupp 1943
Coscinodiscus perforatus var. *cellulosa* Grunow	*Coscinodiscus perforatus* var. *cellulosa* Grun. (ab)		West (US)	Cupp 1943
Coscinodiscus perforatus var. *pavillardi* (Forti) Hustedt	*Coscinodiscus perforatus* var. *pavillardi* (Forti) Hust. (ab)		West (US)	Cupp 1943
Coscinodiscus polychordus	*Thalassiosira anguste-lineata* (A. Schmidt) G. Fryxell & Hasle (ab)	*Coscinodiscus polychordus* Gran	East	Brunel 1962
Coscinodiscus radiatus Ehrenberg	*Azpeitia nodulifera* (A.W.F. Schmidt) G.A. Fryxell & P.A. Sims (ab)	*Coscinodiscus radiatus* Ehrenberg	East/West/Arctic	Sancetta & Calvert 1988 (Bailey 1910, Bailey 1913, Bérard-Therriault et al. 1999, Brunel 1962, Lovejoy et al. 2002, McQuoid & Hobson 2001, Hay et al. 2003)
Coscinodiscus sp.	*Coscinodiscus* sp.		East	Brunel 1962
Coscinodiscus spp.	*Coscinodiscus* spp.		West	McQuoid & Hobson 1997 (McQuoid & Hobson 2001)
Coscinodiscus subbulliens	*Coscinodiscus subbulliens* E.G. Jørgensen (ab)		East	Brunel 1962

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Coscinodiscus subglobosus	*Coscinodiscus subglobosus* P.T. Cleve & A. Grunow (ab)		East	Brunel 1962
Coscinodiscus subtilis Ehr.	*Coscinodiscus subtilis* Ehrenberg (ab)		East	Bailey 1913
Coscinodiscus wailesii Gran & Angst	*Coscinodiscus wailesii* Gran & Angst (ab)		East/West	Horner et al. 2005 (Hargraves & Maranda 2002)
Coscinosira atlantica	*Coscinosira atlantica* P.J.L. Dangeard (ab)		East	Brunel 1962
Coscinosira mediterranea	*Coscinosira mediterranea* J.L.B. Schröder (ab)		East	Brunel 1962
Coscinosira oestrupi Ostenfeld	*Thalassiosira oestrupii* (Ostenfeld) Hasle (ab)	*Coscinosira oestrupii* Ostenfeld	East	Gran & Braarud 1935
Coscinosira polychorda	*Thalassiosira anguste-lineata* (A. Schmidt) G. Fryxell & Hasle (ab)	*Coscinosira polychorda* (Gran) Gran, *Coscinodiscus polychorda* Gran	East/West	Brunel 1962 (Bursa 1963, Gran & Braarud 1935, Horner 2002)
Ctenophora pulchella (Ralfs ex Kutzing) Williams & Round	*Ctenophora pulchella* (Kützing) D.M. Williams & Round	*Synedra pulchella* Ralfs ex Kützing	East	Zwicker 1998
Cyclotella antiqua W.Smith	*Cyclotella antiqua* W.Smith (ab)		Arctic	Antoniades et al. 2005
Cyclotella choctawhatcheeana Prasad	*Cyclotella choctawhatcheeana* Prasad (ab)	*Cyclotella caspia* Grunow, *Cyclotella hakanssoniae* Wendker	East/West (Effingham Inlet)	Hay et al. 2003 (Bérard-Therriault et al. 1999)
Cyclotella compta Grun.	*Cyclotella comta* (Ehrenberg) Kützing (ab)	*Discoplea comta* Ehrenberg, *Puncticulata comta* (Ehrenberg) H. Hakansson	East	Bailey 1910 (Bailey 1913)
Cyclotella kützingiana Thw.	*Cyclotella kützingiana* Thw. (ab)		East	Bailey 1910
Cyclotella litoralis Lange & Syvertsen	*Cyclotella litoralis* Lange & Syvertsen (ab)		West	McQuoid & Hobson 2001
Cyclotella meneghiniana Kg.	*Cyclotella meneghiniana* Kützing (ab)		East	Bailey 1913 (Johnson 1988, Bailey 1910)
Cyclotella operculata (Ag.) Ktz.	*Cyclotella operculata* (C. Agardh) Brébisson (ab)		East (BoF)	Rawlence 1987
Cyclotella sp.	*Cyclotella* sp.		West/Arctic	Sancetta & Calvert 1988 (Bursa 1963)
Cyclotella spp.	*Cyclotella* spp.		East/West/Arctic	Martin (pers. comm.)[2] (Riedel et al. 2003, McQuoid & Hobson 2001, Hay et al. 2003)

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Cyclotella striata Kützing (Grunow)	*Cyclotella striata Kützing* (Grunow) (ab)	*Coscinodiscus striatus* Kützing, *Cyclotella dallasiana* W.Smith	East/West (Effingham Inlet)	Hay et al. 2003 (Bailey 1913, Bérard-Therriault et al. 1999)
Cylindrotheca closterium (Ehrenberg) Lewin & Reimann	*Cylindrotheca closterium* (Ehrenberg) Reimann & Lewin (ab)	*Nitzschiella tenuirostris* Mereschkowsky, *Ceratoneis closterium* Ehrenberg, *Nitzschia closteruim* W. Smith	East/West/Arctic	Horner et al. 2005 (Bérard-Therriault et al. 1999, Thaler 2007, Riedel et al. 2003, Lovejoy et al. 2002, Bates & Strain 2006, Booth & Horner 1997, Rozanska et al. 2008)
Cylindrotheca gracilis (Bréb.) Grun.	*Cylindrotheca gracilis* (Brébisson ex Kützing) Grunow (ab)	*Cylindrotheca gerstenbergeri* Rabenhorst, *Ceratoneis gracilis* Brébisson ex Kutzing, *Nitzschia taenia* W.Smith, *Nitzschiella gracilis* (Brébisson ex Kützing) Rabenhorst	East	Rawlence 1987 (Bérard-Therriault et al. 1999, Thaler 2007, Trites 2005, Bates & Strain 2006)
Cymatopleura elliptica S.B.D.	*Cymatopleura elliptica* (Brébisson) W.Smith (ab)		East	Bailey 1913
Cymatosira lorenziana	*Cymatosira lorenziana* Grunow (ab)		East	Carver & Mallet 2002
Cymatosira sp.	*Cymatosira* sp.		West	Sancetta & Calvert 1988
Cymbella amphicephala Naegeli	*Cymbella amphicephala* Naegeli (ab)		Arctic	Antoniades et al. 2005
Cymbella angustata (W.Smith) Cleve	*Cymbella angustata* (W.Smith) Cleve (ab)		Arctic	Antoniades et al. 2005
Cymbella arctica (Langerstedt) Schmidt	*Cymbella arctica* (Langerstedt) Schmidt (ab)		Arctic	Antoniades et al. 2005
Cymbella botellus (Langerstedt) Schmidt	*Cymbella botellus* (Langerstedt) Cleve (ab)		Arctic	Antoniades et al. 2005
Cymbella cesatii (Rabenhorst) Grunow ex Schmidt	*Encyonopsis cesatii* (Rabenhorst) Krammer (ab)	*Cymbella cesatii* (Rabenhorst) Grunow ex Schmidt	Arctic	Antoniades et al. 2005
Cymbella cistula (Ehrenberg) Kirchner	*Cocconema cistula* (Ehrenberg) Ehrenberg (ab)		Arctic/East	Antoniades et al. 2005 (Bailey 1913)
Cymbella cuspidata Kützing	*Cymbella cuspidata* Kützing (ab)		Arctic/East	Antoniades et al. 2005 (Bailey 1913)
Cymbella descripta (Hustedt) Krammer & Lange-Bertalot	*Cymbella broenlundensis* Foged (ab)	*Cymbella descripta* (Hustedt) Krammer & Lange-Bertalot	Arctic	Antoniades et al. 2005

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Cymbella designata Krammer	*Cymbella designata* Krammer (ab)		Arctic	Antoniades et al. 2005
Cymbella ehrenbergii Kützing	*Cymbella ehrenbergii* Kützing (ab)		East	Bailey 1910
Cymbella gastroides	*Cymbella aspera* (Ehrenberg) Cleve	*Cymbella gastroides* (Kützing) Brébisson & Godey	East	Bailey 1910
Cymbella incerta (Grunow) Cleve	*Cymbella incerta* Grunow (ab)		Arctic	Antoniades et al. 2005
Cymbella lanceolata	*Cymbella lanceolata* (Ehrenberg) Kirchner (ab)	*Cocconema lanceolatum* Ehrenberg, *Gomphonema lanceolatum* Ehrenberg	East	Bailey 1910
Cymbella lapponica Grunow	*Cymbella lapponica* Grunow ex Cleve (ab)		Arctic	Antoniades et al. 2005
Cymbella latens Krasske	*Encyonema latens* (Krasske) D.G. Mann (ab)	*Cymbella latens* Krasske	Arctic	Antoniades et al. 2005
Cymbella microcephala Grunow in Van Heurk	*Encyonopsis microcephala* (Grunow) Krammer (ab)	*Cymbella ruttneri* Hustedt, *Navicula incompta* Krasske	Arctic	Antoniades et al. 2005
Cymbella obscura Krasske	*Encyonema obscurum* (Krasske) D.G. Mann (ab)	*Cymbella obscura* Krasske	Arctic	Antoniades et al. 2005
Cymbella silesiaca Bleisch in Rabenhorst	*Encyonema silesiacum* (Bleisch) D.G. Mann (ab)	*Cymbella silesiaca* Bleisch	Arctic	Antoniades et al. 2005
Cymbella stauroneiformis Lagerstedt	*Cymbella stauroneiformis* Lagerst. (ab)		Arctic	Antoniades et al. 2005
Cymbella spp. Agardh	*Cymbella* spp. Agardh		West (Effingham Inlet)	Hay et al. 2003 (McQuoid & Hobson 2001)
Cymbella tumida Breb.	*Cymbella tumida* (Brébisson in Kützing) van Heurck (ab)	*Cocconema tumidum* Brébisson	East	Bailey & MacKay 1921
Cystopleura turgida (Ehr.) Kuntze	*Epithemia turgida* (Ehrenberg) Kützing (ab)	*Navicula turgida* Ehrenberg	East	Patrick & Reimer 1975
Dactyliosolen antarcticus	*Dactyliosolen antarcticus* Castracane (ab)	*Dactyliosolen antarcticus* var. *typica*, *Dactyliosolen antarcticus* f. *typica* Heiden & Kolbe	West	Hobson 2009
Dactyliosolen blavyanus (H. Peragallo) Hasle	*Dactyliosolen blavyanus* (H. Peragallo) Hasle (ab)	*Guinardia blavyana* H. Peragallo	East/West	Horner et al. 2005

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Dactyliosolen fragilissimus (Bergon) Hasle	*Dactyliosolen fragilissimus* (Bergon) Hasle (ab)	*Rhizosolenia fragilissima* Bergon	East/West/Arctic	Horner et al. 2005 (Bérard-Therriault et al. 1999, Lovejoy 2002, Bates & Strain 2006)
Dactyliosolen mediterraneaus Peragallo	*Leptocylindrus mediterraneus* (H. Peragallo) Hasle (ab)	*Dactyliosolen mediterraneus* (Peragallo) Peragallo	East	Gran & Braarud 1935
Dactyliosolen phuketensis	*Dactyliosolen phuketensis* (B.G. Sundström) G.R. Hasle (ab)	*Rhizosolenia phuketensis* B.G. Sundström	East/West	Hobson 2009 (Carver & Mallet 2002)
Dactyliosolen spp.	*Dactyliosolen* spp.		East	Martin (pers. comm.)[2]
Denticula kuetzingii Grunow	*Denticula kuetzingii* Grunow (ab)	*Nitzschia denticula* Grunow, *Denticula denticula* (Grunow) Schonfeldt	Arctic	Antoniades et al. 2005
Diadesmis contenta (Grunow) Mann	*Diadesmis contenta* (Grunow ex Van Heurck) D.G. Mann (ab)	*Navicula contenta* Grunow ex Van Heurck, *Navicula trinodis* f. *minuta* Grunow, *Schizonema contentum* (Grunow) Kuntze	Arctic	Antoniades et al. 2005
Diadesmis paracontenta Lange-Bertalot & Werum	*Diadesmis paracontenta* Lange-Bertalot & Werum (ab)		Arctic	Antoniades et al. 2005
Diatoma elongatum Ag.	*Diatoma tenuis* C. Agardh (ab)	*Diatoma elongatum* Ag.	East	Rawlence 1987
Diatoma hyemale Lgng.	*Diatoma hyemale* (Roth) Heiberg (ab)		East	Bailey 1910
Diatoma mesodon (Ehrenberg) Kutzing	*Diatoma mesodon* (Ehrenberg) Kützing	*Diatoma hyemalis* f. *mesodon* (Ehrenberg) Grunow, *Diatoma vulgare* var. *mesodon* (Ehrenberg) Grunow, *Odontidium mesodon* (Kützing) Kützing, *Diatoma hyemale* var. *mesodon* (Ehrenberg) Kirchner, *Diatoma hyemalis* var. *mesodon* (Ehrenberg) Grunow	West	Hay et al. 2003
Diatoma moniliformis Kützing	*Diatoma moniliformis* Kützing (ab)	*Diatoma tenue* var. *moniliforme* Kützing	Arctic	Antoniades et al. 2005
Diatoma spp.	*Diatoma* spp.		West	McQuoid & Hobson 2001
Diatoma tenuis Agardh	*Diatoma tenuis* Agardh (ab)	*Diatoma tenuis* var. *elongata* Lyngbye, *Diatoma elongatum* (Lyngbye) C. Agardh Agardh	Arctic	Antoniades et al. 2005
Diatoma tenue Ag.	*Diatoma tenue* Agardh (ab)		East	Bailey 1910
Diatoma tenue var. *elongatum* Lyngbye	*Diatoma tenue* var. *elongatum* (Lyngb.) (ab)		East (BoF)	Poulin et al. 1984a

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Diatomella minuta Hustedt in A. Schmidt, Atlas	*Diatomella minuta* Hustedt in A. Schmidt, Atlas (ab)		West (Effingham Inlet)	Hay et al. 2003
Dicladia capreolus Ehr.	*Dicladia capreolus* Ehrenberg (ab)		East	Bailey 1913
Diploneis bombus	*Diploneis bombus* (Ehrenberg) Cleve	*Pinnularia bombus* Ehrenberg, *Navicula bombus* (Ehrenberg) Kützing, *Navicula abnormis* Castracane	East	Bérard-Therriault et al. 1999
Diploneis didyma (Ehrenberg) Cleve	*Diploneis didyma* (Ehrenberg) Cleve (ab)	*Pinnularia didymus* Ehrenberg, *Navicula didymus* Ehrenberg	East	Linkletter et al. 1977 (Bailey 1913)
Diploneis interrupta (Kützing) Cleve	*Diploneis interrupta* (Kützing) Cleve (ab)	*Navicula interrupta* Kützing, *Schizonema interruptum* (Cleve) Kuntze	East	Thaler 2007
Diploneis litoralis var. *arctica*	*Diploneis litoralis var. arctica* P.T. Cleve (ab)		Arctic	Riedel et al. 2003
Diploneis litoralis var. *clathrata*	*Diploneis litoralis* var. *clathrata* (Østrup) Cleve (ab)		Arctic	Riedel et al. 2003
Diploneis oculata (Brébisson) Cleve	*Diploneis oculata* (Brébisson) Cleve (ab)		Arctic	Antoniades et al. 2005
Diploneis parma Cleve	*Diploneis parma* Cleve		Arctic	Antoniades et al. 2005
Diploneis spp.	*Diploneis* spp.		West	McQuoid & Hobson 2001
Diploneis smithii (Brébisson) Cleve	Diploneis smithii (Brébisson in W. Smith) Cleve (ab)	*Navicula elliptica* W.Smith, *Navicula smithii* Brébisson in W. Smith	East/West (Effingham Inlet)	Hay et al. 2003 (Bailey 1913)
Ditylum brightwellii (West) Grunow	*Ditylum brightwellii* (T. West) Grunow (ab)	*Ditylum trigonum* L.W. Bailey ex L.W. Bailey, *Triceratium brightwellii* T. West, *Ditylum inaequale* J.W. Bailey ex L.W. Bailey	East/West/Arctic	Horner et al. 2005 (Linkletter et al. 1977, Chang et al. 2007, Sancetta & Calvert 1988, Lovejoy et al. 2002, Gran & Braarud 1935, McQuoid & Hobson 1997, 2001, Hay et al. 2003)
Ditylum sol	*Ditylum sol* (Grunow) De Toni (ab)		East	Carver & Mallet 2002
Delphineis surirella (Ehr.) G.W. Andrews	*Delphineis surirella* (Ehrenberg) G.W. Andrews	*Rhaphoneis surirella* (Ehrenberg) Grunow	East	Trites 2005

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Denticula kuetzingii Grunow	*Denticula kuetzingii* Grunow	*Nitzschia denticula* Grunow, *Denticula denticula* (Grunow) Schonfeldt	Arctic	Antoniades et al. 2005
Detonula confervacea	*Detonula confervacea* (Cleve) Gran (ab)	*Lauderia confervacea* Cleve, *Detonula cystifera* Gran	East/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Lovejoy et al. 2002, Gran & Braarud 1935, Bates & Strain 2006)
Detonula cystifera	*Detonula confervacea* (Cleve) Gran (ab)	*Detonula cystifera* Gran	East	Brunel 1962
Detonula pumila (Castracane) Schütt	*Detonula pumila* (Castracane) Schütt	*Schroederella delicatula* Pavillard, *Thalassiosira condensata* Cleve, *Lauderia pumila* Castracane	West	Sancetta & Calvert 1988
Doryphora amphiceros	*Rhaphoneis amphiceros* (Ehrenberg) Ehrenberg (ab)	*Doryphora amphiceros* (Ehrenberg) Kützing	East	Bailey 1913
Doryphora boeckii	*Brébissonia boeckii (Ehrenberg) E. O'Meara (ab)*	*Doryphora boeckii* (Ehrenberg) W. Smith	East	Bailey 1913
Encyonema caespitosum Kutz.	*Encyonema caespitosum* Kutz. (ab)	*Cocconema caespitosum* (Kützing) G.S. West, *Cymbella caespitosa* (Kützing) Schutt, *Cymbella caespitosum* (Kützing) Brun, *Cymbella caespitosa* (Kützing) Brun, *Cymbella ventricosa* var. *caespitosa* (Kützing) Dippel	East	Bailey 1910 (Bailey 1913)
Encyonema elginense (Krammer) Mann	*Cymbella elginensis* Krammer (ab)	*Encyonema elginense* (Krammer) Mann	Arctic	Antoniades et al. 2005
Encyonema fogedii Krammer	*Encyonema fogedii* Krammer (ab)		Arctic	Antoniades et al. 2005
Encyonema gauemannii (Meister) Krammer	*Encyonema gauemannii* (Meister) Krammer (ab)		Arctic	Antoniades et al. 2005
Encyonema lange-bertalotii Krammer	*Encyonema lange-bertalotii* Krammer (ab)		Arctic	Antoniades et al. 2005

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Encyonema minutum (Hilse) Mann	*Encyonema minutum* (Hilse in Rabenhorst) D.G. Mann (ab)	*Encyonema ventricosum* var. *minutum* (Hilse) Mayer, *Cymbella ventricosa* f. *minuta* (Hilse in Rabenhorst) Cleve-Euler, *Cymbella ventricosa* f. *minuta* (Hilse in Rabenhorst) Mayer, *Cymbella ventricosa* f. *minuta* (Hilse in van Heurck) Mereschkowsky, *Encyonema ventricosum* var. *minuta* (Hilse in Rabenhorst) Schmidt, *Encyonema ventricosum* f. *minuta* (Hilse in Rabenhorst) Grunow, *Cymbella gracilis* var. *minuta* (Hilse in Rabenhorst) Rabenhorst, *Cymbella minuta* Hilse in Rabenhorst, *Cymbella* var. *minuta* (Hilse in Rabenhorst) Cleve-Euler	Arctic	Antoniades et al. 2005
Encyonema ventricosum (Agardh) Grunow	*Encyonema ventricosum* (Agardh) Grunow (ab)	*Cocconema ventricosum* (Kützing) G.S. West	East/Arctic	Antoniades et al. 2005 (Bailey 1910)
Endictya oceanica Ehrenberg	*Endictya oceanica* Ehrenberg (ab)		East	Gran & Braarud 1935
Entomoneis kjellmanii	*Entomoneis kjellmanii* (Cleve) Poulin & Cardinal (ab)	*Amphiprora kjellmanii* Cleve, *Entomoneis kjellmanii* var. *typica* Cleve-Euler	East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003)
Entomoneis paludosa var. *duplex*	*Entomoneis paludosa* var. *duplex* (Donkin) D.B. Czarnecki & D.C. Reinke (ab)		East	Bérard-Therriault et al. 1999
Entomoneis paludosa var. *hyperborea*	*Entomoneis paludosa* var. *hyperborea* (Grunow) Poulin & Cardinal (ab)	*Amphiprora hyperborea* Grunow, *Amphiprora paludosa* f. *minuta* Grunow, *Amphiprora hyperborea* var. *genuina* Cleve-Euler	Arctic	Riedel et al. 2003
Entomoneis sp.	*Entomoneis* sp.		Arctic	Riedel et al. 2003 (Booth & Horner 1997)

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Ephemera planamembranacea	*Ephemera planamembranacea* (Hendey) Paddock (ab)	*Navicula planamembranacea* Hendey	East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003)
Epithemia argus W. Sm.	*Epithemia argus* (Ehrenberg) Kützing (ab)	*Cystopleura argus* (Ehrenberg) Kuntze, *Epithemia ocellata* (Ehrenberg) Kützing, *Eunotia argus* Ehrenberg, *Eunotia ocellata* Ehrenberg, *Epithemia argus* var. *ocellata* (Ehrenberg) F. Fricke	East	Bailey 1913
Epithemia gibba Kutz.	*Epithemia gibba* Kützing (ab)		East	Bailey 1910
Epithemia hyndmani	*Epithemia hyndmanii* W.Smith (ab)		East	Bailey 1913
Epithemia musculus Kützing	*Rhopalodia musculus* (Kützing) O.F. Müller (ab)	*Epithemia musculus* Kützing	East	Bailey 1910 (Bailey 1913)
Epithemia turgida Ehr.	*Epithemia turgida* (Ehrenberg) Kützing (ab)	*Navicula turgida* Ehrenberg, *Cymbella turgida* (Ehrenberg) Hassall, *Cystopleura turgida* (Ehrenberg) Kuntze	East	Bailey 1910 (Bailey 1913)
Epithemia zebra Ehr.	*Epithemia adnata* (Kützing) Brébisson (ab)	*Epithemia zebra* (Ehrenberg) Kützing	East	Bailey 1910 (Bailey 1913)
Eucampia cornuta	*Eucampia cornuta* (ab)		East	Carver & Mallet 2002
Eucampia groenlandica	*Eucampia groenlandica* Cleve (ab)		Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Lovejoy et al. 2002)
Eucampia recta	*Eucampia recta* H.H. Gran & T. Braarud		East	Gran & Braarud 1935
Eucampia zodiacus	*Eucampia zodiacus* Ehrenberg (ab)	*Eucampia britannica* W.Smith, *Eucampia nodosa* A. Schmidt	East/West/Arctic	Chang et al. 2007 (Brunel 1962, Bursa 1963, Gran & Braarud 1935)
Eucampia zoodiaca Ehrenberg	*Eucampia zoodiacus* Ehrenberg (ab)	*Eucampia zoodiaca* Ehrenberg	West	Sancetta & Calvert 1988
Eunotia arcus	*Eunotia arcus* Ehrenberg (ab)	*Himantidium arcus* (Ehrenberg) Ehrenberg	East	Bailey 1913
Eunotia curvata (Ktz.) Lagerst v. *curvata*	*Eunotia curvata* var. *curvata* (Kützing) Lagerst (ab)		East	Rawlence 1987
Eunotia diodon Ehr.	*Eunotia diodon* Ehrenberg (ab)		East	Bailey 1913 (Bailey 1910)
Eunotia lunaris	*Eunotia bilunaris* (Ehrenberg) Mills (ab)	*Eunotia lunaris* (Ehrenberg) Grunow	East	Bailey 1910

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Eunotia major	*Eunotia major* (W.Smith) Rabenhorst (ab)		East	Bailey 1910 (Bailey 1913)
Eunotia monodon	*Eunotia monodon* Ehrenberg (ab)	*Eunotia major* (W. Smith) Rabenhorst	East	Bailey 1910 (Bailey 1913)
Eunotia pectinalis	*Eunotia pectinalis* (Kützing) Rabenhorst (ab)	*Eunotia pectinalis* var. *minor* (Kützing) Rabenhorst, *Himantidium pectinale* Kützing	East	Bailey 1910
Eunotia pectinalis var. *undulata* Ralf	*Eunotia pectinalis* var. *undulata* (Ralfs) Rabenhorst (ab)		East	Bailey & MacKay 1921
Eunotia praerupta Ehrenberg	*Eunotia praerupta* Ehrenberg (ab)		Arctic	Antoniades et al. 2005
Eunotia spp.	*Eunotia* spp.		West	Hobson 2009 (Hay et al. 2003, McQuoid & Hobson 2001)
Eunotia tetraodon Ehr.	*Eunotia tetraodon* (Ehrenberg) Ralfs (ab)		East	Bailey 1913
Eupodiscus radiatus	*Eupodiscus radiatus* J.W. Bailey (ab)	*Aulacodiscus radiatus* (J.W. Bailey) Brightwell	East	Carver & Mallet 2002
Fallacia sp.	*Fallacia* sp.		Arctic	Lovejoy et al. 2002
Fossula arctica Hasle, Syvertsen & Quillfeldt	*Fossula arctica* G.R. Hasle, E.E. Syvertsen & C.H. von Quillfeldt (ab)		Arctic	Lovejoy et al. 2002
Fragilaria capucina Desmazieres	*Fragilaria capucina* Desmazières (ab)	*Fragilaria capucina* f. *lanceolata* (Grunow in van Heurck) Hustedt, *Fragilaria capucina* var. *lanceolata* Grunow, *Fragilaria capucina* f. *lanceolata* (Grunow) Skabichevskii	East/Arctic	Linkletter et al. 1977 (Bailey 1913, Antoniades et al. 2005)
Fragilaria capucina var. *gracilis* (Østrup) Hustedt	*Fragilaria capucina* var. *gracilis* (Østrup) Hustedt (ab)		Arctic	Antoniades et al. 2005
Fragilaria construens E.	*Staurosira construens* Ehrenberg (ab)	*Fragilaria construens* Ehrenberg	East	Bailey & MacKay 1921
Fragilaria oceanica	*Fragilariopsis oceanica* (Cleve) Hasle (ab)	*Fragilaria oceanica* Cleve	East	Brunel 1962 (Gran & Braarud 1935)
Fragillaria harrisonii Grun.	*Fragillaria harrisonii* (W.Smith) Grunow (ab)		East	Bailey 1913

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Fragilaria cf. *sopotensis* Witkowski & Lange- Bertalot	*Fragilaria* cf. *sopotensis* Witkowski & Lange- Bertalot (ab)		West (Effingham Inlet)	Hay et al. 2003
Fragilaria spp.	*Fragilaria* spp.		West	McQuoid & Hobson 2001
Fragilaria striatula Lyngbye	*Fragilaria striatula* Lyngbye (ab)		East/Arctic	Poulin et al. 1984b (Bérard-Therriault et al. 1999, Riedel et al. 2003)
Fragilaria vaucheriae (Kützing) Petersen	*Fragilaria vaucheriae* (Kützing) Petersen (ab)	*Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot	Arctic	Antoniades et al. 2005
Fragilariopsis atlantica	*Fragilariopsis atlantica* Paasche (ab)	*Nitzschia paaschei* Hasle	East	Bérard-Therriault et al. 1999
Fragilariopsis cylindrus	*Fragilariopsis cylindrus* (Grunow) Krieger (ab)	*Fragilaria cylindrus* Grunow, *Fragilaria nana* Steemann Nielsen, *Fragilariopsis cylindrus* var. *planctonica* Willi Krieger, *Fragilariopsis cylindrus* f. *minor* Manguin, *Fragilariopsis linearis* var. *intermedia* Manguin, *Nitzschia cylindrus* (Grunow) Hasle	East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003, Lovejoy et al. 2002, Rozanska et al. 2008)
Fragilariopsis doliolus (Wallich) Medlin & Sims	*Fragilariopsis doliolus* (Wallich) Medlin & Sims (ab)	*Synedra doliolus* Wallich, *Pseudo-eunotia doliolus* (Wallich) Grunow	East/West	McQuoid & Hobson 2001 (Carver & Mallet 2002)
Fragilariopsis oceanica	*Fragilariopsis oceanica* (Cleve) Hasle (ab)	*Fragilaria oceanica* Cleve, *Fragilaria arctica* Grunow, *Nitzschia grunowii* Hasle,	East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003, Lovejoy et al. 2002)
Fragilariopsis pseudonana	*Fragilariopsis pseudonana* (Hasle) Hasle (ab)	*Fragilariopsis nana* (Steemann Nielsen) Paasche, *Nitzschia pseudonana* Hasle	East	Bérard-Therriault et al. 1999
Fragilariopsis spp.	*Fragilariopsis* spp.		West/Arctic	Hobson 2009 (Booth & Horner 1997, Hay et al. 2003)
Frustulia vulgaris (Thwait) De T. v. *vulgaris*	*Frustulia vulgaris* var. *vulgaris* (Thwaites) De Toni (ab)		East (BoF)	Rawlence 1987
Gomphonema acuminatum Ehr.	*Gomphonema acuminatum* Ehrenb. (ab)		East	Linkletter et al. 1977 (Bailey 1913, Bailey 1910)

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Gomphonema angustatum (Kützing) Rabenhorst	*Gomphonema angustatum* (Kützing) Rabenhorst (ab)	*Sphenella angustata* Kützing, *Gomphonema bohemicum* Hustedt, *Sphenoneis angustata* (Kützing) Trevisan, *Gomphonema instabilis* Hohn & Hellermann	East/Arctic	Antoniades et al. 2005 (Bailey 1910)
Gomphonema capitatum	*Gomphonema capitatum* Ehrenberg (ab)	*Gomphonema constrictum* f. *clavata* (Ehrenberg) Cleve-Euler, *Gomphonema truncatum* var. *capitata* (Ehrenberg) Woodhead & Tweed, *Gomphonema constrictum* var. *capitatum* (Ehrenberg) Grunow, *Gomphonema constrictum* f. *capitata* (Ehrenberg) Hustedt	East	Bailey 1913
Gomphonema constrictum Ehr.	*Gomphonema truncatum* Ehrenberg (ab)	*Gomphonema constrictum* Ehr.	East	Bailey 1913
Gomphonema crucigerum	*Gomphonema crucigerum*		East (BoF)	Linkletter et al. 1977
Gomphonema exiguum K.	*Gomphonemopsis exigua* (Kützing) Medlin	*Gomphonema exiguum* Kützing	East	Bailey 1910
Gomphonema geminatum A.	*Didymosphenia geminata* (Lyngbye) M. Schmidt (ab)	*Gomphonema geminatum* (Lyngbye) C. Agardh	East	Bailey 1910 (Bailey 1913)
Gomphonema marinum W. Sm.	*Gomphonema marinum* (Kützing) Smith (ab)		East	Bailey 1913 (Bailey 1910)
Gomphonema spp. Agardh	*Gomphonema* spp. Agardh		West (Effingham Inlet)	Hay et al. 2003 (McQuoid & Hobson 2001)
Gomphonemopsis pseudoexigua (Simonsen) Medlin	*Gomphonemopsis pseudoexigua* (Simonsen) Medlin (ab)		West (Effingham Inlet)	Hay et al. 2003
Grammatophora angulosa Ehrenberg	*Grammatophora angulosa* Ehrenberg (ab)		East/West(US)	Cupp 1943
Grammatophora marina (Lyngbye) Kützing	*Grammatophora marina* (Lyngbye) Kützing (ab)	*Diatoma marinum* Lyngbye	East/West(US)/ Arctic	Linkletter et al. 1977 (Bailey 1913, Bailey 1910, Cupp 1943, Bursa 1963, Bates & Strain 2006, McQuoid & Hobson 2001)
Grammatophora marina var. *adriatica* Grunow	*Grammatophora marina* var. *adriatica* Grun. (ab)		West (US)	Cupp 1943

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Grammatophora oceanica (Ehrenberg, 1854, in part) Grunow	*Grammatophora oceanica* Ehrenberg (ab)	*Grammatophora marina* var. *communis* Grunow ex Van Heurck	West (US)	Cupp 1943
Grammatophora serpentina Ehrenberg	*Grammatophora serpentina* Ehrenberg (ab)		East	Linkletter et al. 1977 (Bailey 1913, Bailey 1910)
Grammatophora sp.	*Grammatophora* sp.		Arctic	Bursa 1963
Grammatophora spp.	*Grammatophora* spp.		East/West	Hobson 2009 (McQuoid & Hobson 2001)
Guinardia delicatula (Cleve) Hasle	*Rhizosolenia delicatula* Cleve (ab)		East/West	Horner et al. 2005 (Bérard-Therriault et al. 1999, Bates & Strain 2006, Horner 2002)
Guinardia flaccida (Castracane) H. Peragello	*Guinardia flaccida* (Castracane) H. Peragello (ab)	*Henseniella baltica* Schutt, *Rhizosolenia castracanei* Cleve, *Rhizosolenia flaccida* Castracane, *Guinardia baltica* Schutt	East/West(US)	Cupp 1943 (Linkletter 1977, Gran & Braarud 1935)
Guinardia striata	*Guinardia striata* (Stolterfoth) Hasle	*Eucampia striata* Stolterfoth, *Rhizosolenia stolterfothii* H. Peragallo	East/West	Carver & Mallet 2002 (Horner 2002)
Gyrosigma balticum	*Gyrosigma balticum* (Ehrenberg) Rabenhorst	*Navicula baltica* Ehrenberg, *Pleurosigma balticum* (Ehrenberg) W. Smith	East	Brunel 1962 (Trites 2005, Bates & Strain 2006)
Gyrosigma diaphanum	*Gyrosigma diaphanum* Cleve (ab)		Arctic	Riedel et al. 2003
Gyrosigma distortum (W. Sm.) W. Griffith & Henfrey	*Gyrosigma distortum* (W. Smith) Griffith & Henfrey (col)		East	Thaler 2007 (Trites 2005)
Gyrosigma fasciola (Ehrenberg) J.W. Griffith & Henfrey	*Gyrosigma fasciola* (Ehrenberg) J.W. Griffith & Henfrey (col)	*Ceratoneis fasciola* Ehrenberg, *Pleurosigma fasciola* (Ehrenberg) W. Smith	East	Thaler 2007
Gyrosigma hippocampus (Ehrenberg) Hassall	*Gyrosigma hippocampus* (Ehrenberg) Hassall (ab)	*Navicula hippocampus* Ehrenberg, *Pleurosigma hippocampus* (Ehrenberg) W.Smith	East	Patrick & Reimer 1966
Gyrosigma littorale	*Gyrosigma littorale* (W. Smith) Griffith & Henfrey (ab)	*Pleurosigma littorale* W. Smith	East	Rawlence 1987
Gyrosigma obliquum Grunow	*Gyrosigma obliquum* (Grunow) Boyer (col)		East	Thaler 2007

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Gyrosigma obtusatum (Sullivan & Wormley) Boyer	*G. obtusatum* (Sullivan & Wormley) Boyer (ab)		Arctic	Antoniades et al. 2005
Gyrosigma prolongatum var. *closterioides*	*Gyrosigma prolongatum* var. *closterioides* (Grunow) Cleve	*Pleurosigma prolongatum* var. *closterioides* Grunow	East	Brunel 1962
Gyrosigma spencerii (Quekett) Cleve	*Gyrosigma spencerii* (J.W. Bailey ex Quekett) Griffith & Henfrey (ab)	*Scalptrum spenceri* (Quekett) Kuntze, *Pleurosigma spenceri* var. *kuetzingii* (Grunow) Grunow, *Pleurosigma kuetzingii* Grunow, *Gyrosigma spenceri* (W. Smith) Griffith & Henfrey, *Pleurosigma spencerii* (Bailey ex Quekett) W. Smith, *Navicula spencerii* J.W. Bailey ex Quekett, *Pleuorsigma spencerii* W. Smith, *Gyrosigma kuetzingii* (Grunov) Cleve	East/West (US)/Arctic	Cupp 1943 (Bursa 1963)
Gyrosigma tenuissimum W. Sm.	*Gyrosigma tenuissimum* (W. Smith) Griffith & Henfrey (ab)	*Pleurosigma tenuissimum* W.Smith	East	Rawlence 1987 (Bates & Strain 2006)
Gyrosigma wansbeckii	*Gyrosigma wansbeckii* (Donkin) Cleve	*Pleurosigma wansbeckii* Donkin, *Pleurosigma balticum* var. *wansbeckii* (Donkin) Van Heurck	East	Brunel 1962 (Trites 2005)
Hannaea arcus (Ehrenberg) Patrick in Patrick & Reimer	*Hannaea arcus* (Ehrenberg) R.M. Patrick (ab)		West (Effingham Inlet)/Arctic	Hay et al. 2003 (Antoniades et al. 2005)
Hantzschia weyprechtii	*Hantzschia weyprechtii* Grunow (ab)		Arctic	Riedel et al. 2003
Haslea crucigeroides	*Haslea crucigeroides* (Hustedt) Simonsen (ab)		Arctic	Riedel et al. 2003
Haslea kjellmanii	*Haslea kjellmanii* (Cleve) Simonsen (ab)		Arctic	Riedel et al. 2003
Haslea sp.	*Haslea* sp.		Arctic	Booth & Horner 1997
Haslea vitrea	*Haslea vitrea* (Cleve) Simonsen (ab)	*Pleurosigma vitreum* Cleve	Arctic	Riedel et al. 2003
Hemiaulus membranaceus Cleve	*Hemiaulus membranaceus* Cl. (ab)		East/West (US)	Cupp 1943 (Carver & Mallet 2002)
Hemiaulus sinensis Greville	*Hemiaulus sinensis* Grev. (ab)		East/West (US)	Cupp 1943 (Carver & Mallet 2002)

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Hemidiscus cuneiformis var. *ventricosa* (Castracane) Hustedt	*Hemidiscus cuneiformis* var. *ventricosa* (Castr.) Hust. (ab)		West (US)	Cupp 1943
Himantidium arcus W. Sm.	*Eunotia arcus* Ehrenberg (ab)	*Himantidium arcus* (Ehrenberg) Ehrenberg	East	Bailey 1913
Himantidium gracile Ehr.	*Himantidium gracile* Ehrenberg (ab)		East	Bailey 1913
Himantidium majus W. Sm.	*Himantidium majus* W. Smith (ab)		East	Bailey 1913
Hyalodiscus sp.	*Hyalodiscus* sp. (ab)		West	Sancetta & Calvert 1988
Hyalodiscus subtilis Bail.	*Hyalodiscus subtilis* J.W.Bailey (ab)		East	Bailey 1913
Isthmia enervis Ehr.	*Isthmia enervis* Ehrenberg (ab)	*Isthmia obliquata* (J.E.Smith) C.Agardh, *Isthmiella enervis* Cleve	East	Bailey 1910
Isthmia nervosa Kützing	*Isthmia nervosa* Kütz. (ab)		East/West (US)/Arctic	Bailey 1910 (Cupp 1943, Bursa 1963)
Lauderia confervacea	*Detonula confervacea* (Cleve) Gran (ab)	*Lauderia confervacea* Cleve	East	Brunel 1962
Lauderia annulata	*Lauderia annulata* Cleve (ab)	*Lauderia borealis* Gran	East	Rawlence 1987
Lauderia glacialis	*Porosira glacialis* (Grunow) Jorgensen (ab)	*Lauderia glacialis* (Grunow) Gran	East	Brunel 1962
Lennoxia faveolata	*Lennoxia faveolata* H.A. Thomsen & K.R. Buck (ab)		East	Bérard-Therriault et al. 1999
Leptocylindrus danicus Cleve	*Leptocylindrus danicus* Cleve (ab)		East/West/Arctic	Horner et al. 2005 (Brunel 1962, Bursa 1963, Lovejoy 2002, Gran & Braarud 1935, Bates & Strain 2006)
Leptocylindrus mediterraneus	*Leptocylindrus mediterraneus* (H. Peragallo) Hasle (ab)	*Lauderia mediterranea* H. Peragallo, *Dactyliosolen mediterraneus* (Peragallo) Peragallo, *Dactyliosolen mediterraneus* var. *tenuis* Cleve, *Dactyliosolen tenuis* (Cleve) Gran, *Dactyliosolen meleagris* Karsten	East	Bérard-Therriault et al. 1999 (Bates & Strain 2006)

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Leptocylindrus minimus Gran	*Leptocylindrus minimus* Gran (ab)	*Leptocylindrus belgicus* Meunier	East/West	Horner et al. 2005 (Linkletter et al. 1977, Chang et al. 2007, Bérard-Therriault et al. 1999, Gran & Braarud 1935, Bates & Strain 2006)
Licmophora abbreviata Agardh	*Licmophora abbreviata* C. Agardh (ab)		East/Arctic	Bursa 1963 (Bates & Strain 2006)
Licmophora flabellata W.S.	*Licmophora flabellata* C. Agardh (ab)	*Exilaria flabellata* Greville	East	Bailey 1913
Licmophora hyalina (Kützing) Grunow	*Licomorpha hyalina* (Kützing) Grunow (ab)		East	Poulin et al. 1984a
Licmophora lyngbyei (Kützing) Grunow ex Van Heurck	*Licmophora lyngbyei* (Kützing) Grunow ex Van Heurck (ab)	*Licomorpha abbreviata* C.Agardh, *Podosphenia lyngbyei* Kutzing	East/West (US)	Cupp 1943 (Bailey 1910)
Licmophora spp.	*Licmophora* spp.		West	Hobson 2009 (McQuoid & Hobson 2001)
Licmophora tincta	*Licmophora tincta*		East	Bailey 1913
Lyrella clavata	*Lyrella clavata* (Gregory) Mann (ab)	*Navicula clavata* Gregory	East	Bérard-Therriault et al. 1999
Lyrella sp.	*Lyrella* sp.		West	Hobson 2009 (McQuoid & Hobson 2001)
Manguinea sp. Paddock	*Manguinea* sp. Paddock		Arctic	Lovejoy et al. 2002
Mastogloia elliptica	*Mastogloia elliptica* (C. Agardh) Cleve (ab)	*Frustulia elliptica* C.Agardh, *Amphora elliptica* (Agardh) Kützing, *Mastogloia danseii* var. *elliptica* Van Heurck	East	Bailey 1910
Mastogloia exigua Lewis	*Mastogloia exigua* F.W. Lewis (ab)		East	Bailey 1913
Mastogloia lanceolata S.B.D.	*Mastogloia lanceolata* Thwaites (ab)		East	Bailey 1913
Mastogloia smithii Thw.	*Mastogloia smithii* Thwaites ex W. Smith (ab)		East	Bailey 1910
Mediopyxis helysia	*Mediopyxis helysia* (ab)		East	Martin & LeGresley 2008

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Melosira arctica	*Melosira arctica* Dickie (ab)	*Melosira hyperborea* Schütt, *Gaillonella arctica* (Dickie) Ehrenberg	East/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Zwicker 1998, Riedel et al. 2003, Bursa 1963, Lovejoy et al. 2002, Booth & Horner 1997, Rozanska et al. 2008)
Melosira borreri	*Melosira borreri* Greville		East	Fritz 1921 (Brunel 1962, Bailey 1910, Bailey 1913)
Melosira crenulata	*Melosira crenulata* (Ehrenberg) Kützing (ab)		East	Linkletter et al. 1977 (Bailey 1910, Fritz 1921)
Melosira distans (Ehr.) Ktz.	*Aulacoseria distans* (Ehrenb.) Simonsen (ab)	*Melosira distans* (Ehrenberg) Kützing	East	Rawlence 1987
Melosira glacialis	*Melosira glacialis* (A. Grunow) A. Cleve-Euler (ab)		East	Brunel 1962
Melosira granulata (Ehr.) Ralfs	*Aulacoseira granulata* (Ehrenberg) Simonsen (ab)	*Melosira granulata* (Ehrenberg) Ralfs	East	Rawlence 1987 (Bailey 1910)
Melosira granulata v. *angustissima* O. Müller	*Aulacoseira granulata* var. *angustissima* (O.F. Müller) Simonsen (ab)	*Melosira granulata* var. *angustissima O.F. Müller*	East	Rawlence 1987
Melosira hyperborea Grunow	*Melosira hyperborea* Grunow (ab)		East (BoF)	Linkletter et al. 1977 (Fritz 1921)
Melosira italica (Ehr.) Ktz.	*Aulacoseira italica* (Ehrenberg) Simonsen (ab)	*Melosira italica* (Ehr.) Ktz.	East (BoF)	Rawlence 1987
Melosira juergensii Ag.	*Melosira lineata* (Dillwyn) Agardh (ab)	*Melosira juergensii* Ag.	East	Bailey 1910 (Zwicker 1998)
Melosira lineata (Dillw.) C.A. Ag.	*Melosira lineata* (Dillwyn) Agardh (ab)	*Melosira juergensii* C. Agardh, *Gallionella lineata* (Dillwyn) Bory in Ehrenberg, *Conferva lineata* Dillwyn, *Lysigonium lineatum* (Dillwyn) Trevisan	East (BoF)	Rawlence 1987 (Brunel 1962)
Melosira marina	*Melosira marina* (W.Smith) Janisch (ab)		East (BoF)	Linkletter et al. 1977

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Melosira moniliformis (Müller) Agardh	*Melosira moniliformis* (O.F. Müller) C. Agardh (ab)	*Lysigonium moniliforme* (O.F. Müller) Trevisan, *Lysigonium moniliforme* (O.F. Müller) Link, *Conferva moniliformis* O.F. Müller, Melosira borreri var. *moniliformis* (O.F. Müller) A. Grunow	East/West	Linkletter et al. 1977 (McQuoid & Hobson 2001)
Melosira moniliformis var. *subglobosa*	*Melosira moniliformis* var. *subglobosa* (Grunow) Hustedt	*Melosira borreri* var. *subglobosa* A. Grunow	East	Brunel 1962
Melosira nummuloides Ag.	*Melosira nummuloides* C.A. Agardh (ab)		East/West (Effingham inlet)/Arctic	Hay et al. 2003 (Bailey 1913, Bailey 1910, Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963)
Melosira octagona	*Melosira octogona* Schmidt (ab)		East	Bailey 1910
Melosira orichalcea Ken.	*Melosira orichalcea* (Mertens ex Jürgens) Kützing (ab)	*Conferva orichalcea* Mertens ex Jürgens	East	Bailey 1910
Melosira sp.	*Melosira* sp.		East/West/Arctic	Sancetta & Calvert 1988 (Bursa 1963, Bates & Strain 2006)
Melosira spp.	*Melosira* spp.		West	McQuoid & Hobson 2001
Melosira subflexilis Kutz.	*Melosira subflexilis* Kutzing (ab)		East	Bailey 1913 (Bailey 1910)
Melosira subsalsa	*Melosira subsalsa* Cleve-Euler (ab)		East	Brunel 1962
Melosira sulcata	*Paralia sulcata* (Ehrenberg) Cleve (ab)	*Melosira sulcata* (Ehrenberg) Kützing	East	Fritz 1921 (Brunel 1962, Gran & Braarud 1935, Bailey 1910)
Melosira varians Ag.	*Melosira varians* C. Agardh (ab)	*Lysigonium varians* (C.Agardh) DeToni	East	Bailey 1913 (Bailey 1910)
Membraneis challengeri Pfizer	*Membraneis challengeri* (Grunow) Paddock (ab)	*Navicula challengeri* Grunow, *Tropidoneis antarctica* (Grunow in Cleve & Möller) Cleve	East	Bérard-Therriault et al. 1999
Meridion circulare Ag.	*Meridion circulare* (Greville) C. Agardh (ab)	*Exilaria circularia* (Greville) Greville, *Echinella circularis* Greville, *Exilaria circularis* (Greville) C. Agardh	East	Bailey 1913 (Brunel 1962)
Meridion intermedium H.L.S.	*Meridion intermedium* H.L. Smith (ab)		East	Bailey 1913 (Bailey 1910)
Meridion spp.	*Meridion* spp.		West	McQuoid & Hobson 2001

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Meuniera membranacea	*Meuniera membranacea* (Cleve) P.C. Silva (ab)	*Stauropsis membranacea* (Cleve) Meunier, *Navicula membranacea* Cleve, *Stauroneis membranacea* (Cleve) Hustedt	Arctic	Riedel et al. 2003
Minidiscus chilensis	*Minidiscus chilensis* Rivera (ab)		East	Bérard-Therriault et al. 1999
Minidiscus comicus	*Minidiscus comicus* Takano (ab)		East	Bérard-Therriault et al. 1999
Minidiscus spp. Hasle	*Minidiscus* spp. Hasle		West (Effingham Inlet)	Hay et al. 2003 (Sancetta & Calvert 1988, McQuoid & Hobson 2001)
Minidiscus trioculatus	*Minidiscus trioculatus* (F.J.R. Taylor) Hasle (ab)	*Coscinodiscus trioculatus* F.J.R. Taylor	East	Bérard-Therriault et al. 1999
Minutocellulus Hasle, von Stosch and Syvertsen sp.	*Minutocellulus* Hasle, von Stosch and Syvertsen sp. (ab)		Arctic	Lovejoy et al. 2002
Navicula acuta S.B.D.	*Navicula acuta* Skvortzov (ab)		East	Bailey 1913
Navicula algida	*Navicula algida* Grunow (ab)		Arctic	Riedel et al. 2003
Navicula americana Ehr.	*Sellaphora americana* (Ehrenberg) D.G. Mann (ab)	*Navicula americana* Ehrenberg	East	Bailey 1913
Navicula bacillum Ehrenberg	*Sellaphora bacillum* (Ehrenberg) D.G. Mann (ab)	*Navicula bacillum* Ehrenberg	Arctic	Antoniades et al. 2005
Navicula baileyana Grun.	*Navicula baileyana* Grunow ex A. Schmidt (ab)		East	Bailey 1913
Navicula binodis Ehrenberg	*Neidium binodis* (Ehrenberg) Hustedt (ab)		East	Rawlence 1987
Navicula bryophila (Petersen) Lange-Bertalot	*Navicula bryophila* Petersen (ab)		Arctic	Antoniades et al. 2005
Navicula chiarae Lange-Bertalot & Genkal	*Navicula chiarae* Lange-Bertalot & Genkal (ab)		Arctic	Antoniades et al. 2005
Navicula cincta (Ehrenberg) Ralfs	*Navicula cincta* (Ehrenberg) Ralfs (ab)	*Navicula umida* Bock, *Navicula inutilis* Krasske, *Navicula cincta* var. *heuflerii* Grunow, *Pinnularia cincta* Ehrenberg, *Schizonema cinctum* (Ehrenberg) Kuntze, *Navicula cari* var. *cincta* (Ehrenberg) Lange-Bertalot	Arctic	Antoniades et al. 2005

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Navicula clementis Grunow	*Navicula clementis* Grunow (ab)	*Placoneis clementis* (Grunow) E.J.Cox, *Navicula inclementis* Hendey, *Navicula clementis* var. *rhombica* Brockmann, *Schizonema clementis* (Grunow) Kuntze, *Placoneis rhombica* (Brockmann) Lange-Bertalot	Arctic	Antoniades et al. 2005
Navicula clunthensis f. *rostrata*	*Navicula cluthensis* f. *rostrata* (Simonsen) Hustedt (ab)	*Navicula pseudoglacialis* f. *rostrata* Simonsen	East	Bérard-Therriault et al. 1999
Navicula cocconeiformis Gregory ex Greville	*Cavinula cocconeiformis* (Gregory ex Greville) D.G. Mann & A.J. Stickle (ab)	*Navicula cocconeiformis* Gregory ex Greville	Arctic	Antoniades et al. 2005
Navicula crucigera Cleve	*Haslea crucigera* (W. Smith) Simonsen (ab)	*Stauroneis crucigera* (W. Smith) Heiberg, *Navicula crucigera* (W. Smith) Cleve	East (BoF)	Lakshminaryana 1983
Navicula cryptocephala Kützing	*Navicula cryptocephala* Kützing (ab)	*Navicula cryptocephala* forma *terrestris* Lund, *Schizonema cryptocephalum* (Kützing) Kuntze, *Navicula cryptocefalsa* Lange-Bertalot	Arctic	Antoniades et al. 2005
Navicula cyprinus	*Navicula cyprinus* (Ehrenberg) Kützing (ab)		East	Bailey 1913
Navicula dicephala (Ehrenberg) W.Smith	*Navicula dicephala* (Ehrenberg) W.Smith (ab)		East	Bailey 1913
Navicula digito-radiata (Greg.) Ralfs.	*Navicula digito-radiata* (Greg.) Ralfs (ab)		East (BoF)	Rawlence 1987
Navicula directa	*Pinnularia directa* W.Smith (ab)		East/Arctic	Bailey 1913 (Bérard-Therriault et al. 1999, Riedel et al. 2003, Lovejoy et al. 2002, Rozanska et al. 2008)
Navicula distans (W. Smith) Ralfs	*Navicula distans* (W. Smith) Schmidt (ab)	*Pinnularia distans* W.Smith	East/West (US)/Arctic	Cupp 1943 (Bailey 1913, Bailey 1910, Bursa 1963, Gran & Braarud 1935, Hobson & McQuoid 2001)
Navicula egregia Hustedt	*Fallacia egregia* (Hustedt) D.G. Mann (ab)	*Navicula egregia* Hustedt	Arctic	Antoniades et al. 2005

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Navicula elliptica	*Diploneis elliptica* (Kützing) Cleve (ab)	*Navicula elliptica* Kützing	East	Bailey 1910 (Bailey 1913)
Navicula gandrupii Krasske	*Navicula gandrupii* (Petersen) Krasske (ab)		Arctic	Antoniades et al. 2005
Navicula gelida	*Navicula gelida* Grunow		Arctic	Riedel et al. 2003
Navicula gemmata Grev.	*Navicula gemmata* Grev. (ab)		East (BoF)	Rawlence 1987
Navicula gerloffii Schimanski	*Navicula gerloffii* Schimanski (ab)		Arctic	Antoniades et al. 2005
Navicula globulifera Hustedt	*Navicula globulifera* Hustedt (ab)		Arctic	Antoniades et al. 2005
Navicula graeffii Grunow ex A. Schmidt	*Navicula graeffii* Grunow ex A. Schmidt (ab)		East (BoF)	Rawlence 1987
Navicula granii	*Navicula granii* (Jørgensen\ Gran (ab)	*Stauroneis granii* E. Jorgensen	East/Arctic	Brunel 1962 (Riedel et al. 2003, Lovejoy et al. 2002)
Navicula gregaria Donkin	*Navicula gregaria* Donkin (ab)	*Schizonema gregarium* (Donkin) Kuntze	West (Effingham Inlet)	Hay et al. 2003 (Bérard-Therriault et al. 1999)
Navicula halophilioides Hustedt	*Navicula halophilioides* Hustedt (ab)		Arctic	Antoniades et al. 2005
Navicula hennedyi S.B.D.	*Lyrella hennedyi* (W. Smith) Stickle & Mann (ab)	*Navicula hennedyi* S.B.D.	East	Bailey 1913
Navicula impexa	*Navicula impexa* Hustedt (ab)		Arctic	Riedel et al. 2003
Navicula insociabilis	*Fallacia insociabilis* (Krasske) D.G. Mann	*Navicula fritschii* J.W.G. Lund, *Navicula insociabilis* Krasske	Arctic	Antoniades et al. 2005
Navicula kariana var. *frigida*	*Navicula kariana* var. *frigida* (Grunow) Cleve (ab)		East	Bérard-Therriault et al. 1999
Navicula krasskei Hustedt	*Navicula krasskei* Hustedt (ab)		Arctic	Antoniades et al. 2005
Navicula kryophila	*Navicula criophila* (Castracane) De Toni	*Navicula kryophila* Cleve	Arctic	Booth & Horner 1997
Navicula lenzii Hust. in Schmidt	*Navicula lenzii* Hust (ab)		Arctic	Antoniades et al. 2005
Navicula liber S.B.D.	*Navicula liber* W.Smith (ab)		East	Bailey 1913
Navicula longa Ralfs.	*Navicula longa* (Gregory) Ralfs ex Pritchard (ab)	*Pinnularia longa* Gregory	East	Bailey 1913
Navicula maculata Bail.	*Navicula maculata* Hustedt (ab)		East	Bailey 1913 (Bailey 1910)
Navicula major Ktz.	*Navicula major* Kützing		East	Bailey 1910 (Bailey 1913)
Navicula marina Ralfs	*Petroneis marina* (Ralfs ex Pritchard) D.G. Mann (ab)	*Navicula punctulata* W. Smith, *Navicula marina* Ralfs ex Pritchard	East	Bailey 1910

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Navicula mesolepta Kutz.	*Pinnularia mesolepta* (Ehrenberg) W. Smith (ab)	*Navicula mesolepta* Kutz.	East	Bailey 1913
Navicula minuscula	*Adlafia minuscula* (Grunow) H. Lange-Bertalot (ab)	*Navicula pseudoexilissima* Hustedt, *Navicula importunata* Hustedt, *Navicula muralis* Grunow, *Navicula minuscula* var. *muralis* (Grunow) Lange-Bertalot, *Navicula cloacina* Lange-Bertalot & Bonik, *Navicula minuscula* Grunow	East	Bailey 1910
Navicula mutica Kutzing	*Luticola mutica* (Kützing) D.G. Mann	*Navicula imbricata* Bock, *Navicula mutica* Kützing	Arctic	Antoniades et al. 2005
Navicula nobilis Ehr.	*Navicula nobilis* Kützing (ab)		East	Bailey 1910 (Bailey 1913)
Navicula patula S.B.D.	*Navicula patula* W.Smith (ab)		East	Bailey 1913
Navicula pelagica	*Navicula pelagica* Cleve (ab)	*Stauropsis pelagica* (Cleve) Meunier	East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003, Lovejoy et al. 2002, Booth & Horner 1997)
Navicula pellucidula	*Navicula pellucidula* Hustedt (ab)		Arctic	Riedel et al. 2003
Navicula peregrina Ktz.	*Navicula peregrina* (Ehrenberg) Kützing (ab)	*Pinnularia peregrina* Ehrenberg	East	Linkletter et al. 1977 (Bailey 1913 & Bailey 1910)
Navicula permagna Bail.	*Caloneis permagna* (J.W. Bailey) Cleve (ab)	*Navicula permagna* (Bailey) A.M. Edwards	East	Bailey 1910 (Bailey 1913)
Navicula perminuta Grunow in Van Heurck	*Navicula perminuta* Grunow (ab)	*Navicula disterta* Hustedt, *Navicula cryptocephala* var. *perminuta* (Grunow) Cleve	West (Effingham Inlet)	Hay et al. 2003 (Bérard-Therriault et al. 1999)
Navicula phyllepta Kutzing	*Navicula phyllepta* Kützing (ab)	*Navicula phyllepta* Kützing, *Navicula lanceolata* var. *phyllepta* (Kützing) van Heurck	Arctic	Antoniades et al. 2005
Navicula pseudotenelloides Krasske	*Navicula pseudotenelloides* Cholnoky (ab)		Arctic	Antoniades et al. 2005
Navicula pupula var. *mutata* (Krasske) Hustedt	*Navicula pupula* var. *mutata* (Krasske) Hustedt (ab)		Arctic	Antoniades et al. 2005
Navicula quadripedis	*Navicula septentrionalis* (Grunow) Gran (ab)	*Navicula quadripedis* Cleve-Euler	East	Brunel 1962

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Navicula radiosa S.B.D.	*Navicula radiosa* Kützing (ab)	*Navicula radiosa* var. *tenella* (Brébisson) Van Heurck, *Schizonema radiosum* (Kützing) Kuntze	East	Bailey 1913
Navicula recurvata	*Navicula recurvata* Gran (ab)		Arctic	Riedel et al. 2003
Navicula semen Ehr.	*Navicula semen* Ehrenberg (ab)		East	Bailey 1913
Navicula septentrionalis	*Navicula septentrionalis* (Grunow) Gran (ab)	*Stauroneis septentrionalis* Grunow, *Navicula quadripedis* Cleve-Euler	East/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Riedel et al. 2003, Lovejoy et al. 2002, Booth & Horner 1997)
Navicula spp.	*Navicula* spp.		East/West (US)/Arctic	Horner et al. 2005 (Lovejoy et al. 2002, Bates & Strain 2006, Booth & Horner 1997, McQuoid & Hobson 2001)
Navicula soehrensis Krasske	*Navicula soehrensis* Krasske (ab)		Arctic	Antoniades et al. 2005
Navicula superba var. *subacuta*	*Navicula superba* var. *subacuta* Gran		Arctic	Riedel et al. 2003
Navicula transitans Cl.	*Navicula transitans* Cl. (ab)		East (BoF)/Arctic	Rawlence 1987 (Booth & Horner 1997)
Navicula transitans var. *derasa*	*Navicula transitans* var. *derasa* (Grunow) Cleve (ab)	*Navicula derasa* Grunow	East	Bérard-Therriault et al. 1999
Navicula transitans var. *derasa* f. *delicatula*	*Navicula transitans* var. *derasa* f. *delicatula* Heimdal (ab)		East/Arctic	Bérard-Therriault et al. 1999 (Lovejoy et al. 2002)
Navicula trigonocephala	*Navicula trigonocephala* Cleve		East/Arctic	Riedel et al. 2003 (Booth & Horner 1997)
Navicula trigonocephala var. *depressa*	*Navicula trigonocephala* var. *depressa* Østrup		Arctic	Riedel et al. 2003
Navicula tripunctata (O.F. Mull.) Bory v. *tripunctata*	*Navicula tripunctata* var. *tripunctata* (O.F. Müller) Bory (ab)		East	Rawlence 1987
Navicula vanhoeffenii	*Navicula vanhoeffenii* Gran (ab)	*Stauropsis vanhoeffenii* (Gran) Meunier	East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003, Lovejoy et al. 2002, Gran & Braarud 1935, Booth & Horner 1997)
Navicula viridis Ktz.	*Navicula viridis* (Nitzsch) Kützing		East	Bailey 1910 (Bailey 1913)

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Navicula vulpina Kützing	*Navicula vulpina* Kützing (ab)	*Schizonema vulpinum* (Kützing) Kuntze, *Navicula gracilis* var. *vulpina* (Kützing) Rabenhorst, *Navicula viridula* var. *vulpina* (Kützing) Lange-Bertalot	Arctic	Antoniades et al. 2005
Neidium ampliatum (Ehrenberg) Krammer	*Neidium ampliatum* (Ehrenberg) Krammer (ab)	*Navicula ampliata* Ehrenberg, *Neidium iridis* var. *ampliatum* (Ehrenberg) Cleve	Arctic	Antoniades et al. 2005
Neidium bergii (Cleve) Krammer	*Neidium bergii* (Cleve) Krammer (ab)		Arctic	Antoniades et al. 2005
Neidium binode (Ehr.) Hust. v. *binode*	*Neidium binode* (Ehr.) Hust. v. *binode*		East	Rawlence 1987
Neodenticula seminae	*Neodenticula seminae* (R. Simonsen & T. Kanaya) F. Akiba & Y. Yanagisawa (ab)	*Denticula seminae* R. Simonsen & T. Kanaya, *Denticula marina* Semina, *Denticulopsis seminae* (Simonsen & Kanaya) Simonsen	East/West	Martin & LeGresley 2008
Nitzschia amphibia Grunow	*Nitzschia amphibia* Grunow (ab)		Arctic	Antoniades et al. 2005 (Zwicker 1998)
Nitzschia angularis S.B.D.	*Nitzschia angularis* W.Smith (ab)		East	Bailey 1913 (Bailey 1910)
Nitzschia bilobata	*Nitzschia bilobata* W. Smith (ab)		East	Linkletter et al. 1977 (Bailey 1913 & Bailey 1910)
Nitzschia bilobata var. *minor* Grun.	*Nitzschia bilobata* var. *minor* Grun. (ab)		West (US)	Cupp 1943
Nitzschia brevissima Grunow in Van Heurck	*Nitzschia brevissima* Grunow	*Nitzschia parvula* Lewis, *Nitzschia parvula* var. *terricola* Lund	East	Thaler 2007
Nitzschia circumsuta Bail.	*Nitzschia circumsuta* (Bailey) Grunow (ab)	*Surirella circumsuta* J.W.Bailey	East	Bailey 1913 (Bailey 1910)
Nitzschia clausii Hantzsch	*Nitzschia clausii* Hantzsch (ab)		Arctic	Antoniades et al. 2005

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Nitzschia closterium	*Nitzschia closterium* (Ehrenberg) W. Smith (ab)	*Ceratoneis closterium* Ehrenberg, *Nitzschiella closterium* (Ehrenberg) Rabenhorst, *Nitzschia longissima* var. *closterium* (Ehrenberg) Van Heurck, *Nitzschia curvirostris* var. *closterium* (Ehrenberg) De Toni, *Nitzschiella longissima* var. *closterium* (Ehrenberg) Peragallo & Peragallo, *Homoeocladia closterium* (Ehrenberg) Kuntze, *Cylindrotheca closterium* (Ehrenberg) Reimann & Lewin	East/Arctic	Brunel 1962 (Fritz 1921, Bursa 1963, Bailey 1910, Bailey 1913)
Nitzschia commutata Grunow	*Nitzschia commutata* Grunow (ab)	*Nitzschia pseudoamphioxys* Hustedt	Arctic	Antoniades et al. 2005
Nitzschia constricta Grun.	*Nitzschia constricta* (Gregory) Grunow		East	Bailey 1910
Nitzschia bilobata	*Nitzschia bilobata* W. Smith (ab)		East	Fritz 1921
Nitzschia debilis (Arnott) Grunow	*Tryblionella debilis* Arnott ex O'Meara (ab)	*Nitzschia debilis* (Arnott) Grunow	Arctic	Antoniades et al. 2005
Nitzschia delicatissima	*Pseudo-nitzschia delicatissima* (Cleve) Heiden (ab)	*Nitzschia delicatissima* Cleve	East/West/Arctic	Sancetta & Calvert 1988 (Brunel 1962, Bursa 1963, Gran & Braarud 1935)
Nitzschia dissipata var. *media* (Hantzsch) Grunow in Van Heurck	*Nitzschia dissipata* var. *media* (Hantzsch) Grunow (ab)	*Nitzschia tenuis* var. *media* (Hantzsch) Rabenhorst, *Nitzschia media* Hantzsch	Arctic	Antoniades et al. 2005
Nitzschia epithemioides Grunow	*Nitzschia epithemoides* Grunow (ab)	*Nitzschia epithemiformis* Lange-Bertalot	East	Thaler 2007
Nitzschia filiformis (W.Smith) Van Heurck	*Nitzschia filiformis* (W.Smith) Hustedt (ab)		East	Ginn (pers. comm.)
Nitzschia fontifuga	*Nitzschia fontifuga* Cholnoky (ab)		East	Bérard-Therriault et al. 1999
Nitzschia frigida	*Nitzschia frigida* Grunow (ab)		East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003, Bursa 1963, Lovejoy et al. 2002, Booth & Horner 1997, Rozanska et al. 2008)

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Nitzschia frustulum (Kützing) Grunow in Cleve and Grunow	*Nitzschia austriaca* Hustedt (ab)	*Nitzschia frustulum* (Kützing) Grunow	West (Effingham Inlet)	Hay et al. 2003 (Zwicker 1998)
Nitzschia gracilis	*Nitzschia gracilis* Hantzsch (ab)		East	Bailey 1913
Nitzschia granulata	*Tryblionella granulata* (Grunow) D.G. Mann (ab)	*Nitzschia granulata* Grunow	East	Bailey 1910
Nitzschia hudsonii	*Nitzschia hudsonii* M. Poulin & A. Cardinal (ab)		Arctic	Riedel et al. 2003
Nitzschia inconspicua Grunow	*Nitzschia inconspicua* Grunow (ab)		West (Effingham Inlet)/Arctic	Hay et al. 2003 (Antoniades et al. 2005)
Nitzschia laevissima	*Nitzschia laevissima* Grunow (ab)		Arctic	Riedel et al. 2003 (Booth & Horner 1997)
Nitzschia levidensis Ant.	*Tryblionella levidensis* W. Smith (ab)	*Nitzschia levidensis* (W. Smith) Grunow	East	Bailey 1910
Nitzschia ligowskii Witkowski, Lange-Bertalot, Kociolek & Brzezinska	*Nitzschia ligowskii* Witkowski, Lange-Bertalot, Kociolek & Brzezinska (col)		East	Thaler 2007
Nitzschia linearis W. Sm.	*Nitzschia linearis* (Agardh) W. Smith (ab)		East	Bailey 1913
Nitzschia lineola Gran	*Pseudo-nitzschia lineola* (Cleve) Hasle (ab)	*Nitzschia lineola* Cleve	Arctic	Bursa 1963
Nitzschia littoralis Grun.	*Tryblionella littoralis* (Grunow) D.G. Mann (ab)	*Nitzschia littoralis* Grunow	East	Bailey 1910
Nitzschia longissima Ralfs	*Nitzschia longissima* (Brébisson in Kützing) Ralfs (ab)	*Nitzschia birostrata* W. Smith, *Ceratoneis longissima* Brébisson	East/West/Arctic	Bailey 1910 (Bérard-Therriault et al. 1999, Brunel 1921, Lovejoy et al. 2002, Bailey 1913, Rozanska et al. 2008)
Nitzschia longissima var. *closterium*	*Nitzschia closterium* (Ehrenberg) W. Smith (ab)	*Nitzschia longissima* var. *closterium* (Ehrenberg) Van Heurck	East	Brunel 1962
Nitzschia longicruris	*Nitzschia longicruris*		East (NS)	Rafuse (pers. comm.)[4]
Nitzschia neofrigida	*Nitzschia neofrigida* Medlin (ab)		Arctic	Booth & Horner 1997
Nitzschia pacifica Cupp	*Nitzschia pacifica* Cupp (ab)		West (US)	Cupp 1943
Nitzschia palea (Kützing) W.Smith	*Nitzschia palea* (Kützing) W.Smith (ab)		Arctic	Antoniades et al. 2005
Nitzschia paleacea Grunow	*Nitzschia paleacea* Grunov (ab)		Arctic	Antoniades et al. 2005

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Nitzschia palustris Hustedt	*Nitzschia palustris* Hustedt (ab)		Arctic	Antoniades et al. 2005
Nitzschia paradoxa	*Tryblionella granulata* (Grunow) D.G. Mann		East	Bailey 1910
Nitzschia paradoxa var. *tumidula*	*Bacillaria paxillifer* var. *tumidula* (Grunow) Witkowski, Lange-Bertalot & Metzeltin (ab)		Arctic	Riedel et al. 2003
Nitzschia pellucida	*Nitzschia pellucida* Grunow (ab)		East	Bérard-Therriault et al. 1999 (Trites 2005)
Nitzschia perminuta (Grunow) M. Peragallo	*Nitzschia perminutum* (Grunow) M. Peragallo (ab)	*Nitzschia hiemalis* Hustedt, *Nitzschia frustulum* var. *perminutum* Grunow	West (Effingham Inlet)/Arctic	Hay et al. 2003 (Antoniades et al. 2005)
Nitzschia plana W. Sm.	*Nitzschia plana* W.Smith (ab)		East	Bailey 1913
Nitzschia polaris	*Nitzschia polaris* Grunow ex Cleve (ab)		Arctic	Booth & Horner 1997
Nitzschia punctata Grunow	*Nitzschia punctata* Grunow (ab)		East	Linkletter et al. 1977 (Bailey 1910)
Nitzschia pungens	*Pseudo-nitzschia pungens* (Grunow ex Cleve) Hasle (ab)	*Nitzschia pungens* Grunow ex Cleve	East	Sancetta & Calvert 1988 (Johnson 1988)
Nitzschia pungens var. *atlantica* Cleve	*Nitzschia pungens* var. *atlantica* Cl. (ab)		West (US)	Cupp 1943
Nitzschia pura Hustedt	*Nitzschia pura* Hustedt (ab)		Arctic	Antoniades et al. 2005
Nitzschia pusilla Grunow	*Nitzschia pusilla* Grunow (ab)	*Nitzschia kützingiana* Hilse, *Nitzschia obtusangula* Hustedt, *Nitzschia indistincta* Michailov, *Nitzschia amphioxys* var. *pusilla* (Grunow) Mayer, *Hantzschia amphioxys* var. *pusilla* (Grunow) Dippel, *Nitzschia indistincta* Michailov	Arctic	Antoniades et al. 2005
Nitzschia rectilonga	*Nitzschia rectilonga* Takano (ab)		East	Bérard-Therriault et al. 1999
Nitzschia scabra	*Nitzschia scabra* Cleve (ab)		Arctic	Riedel et al. 2003
Nitzschia scalaris	*Nitzschia scalaris* (Ehrenb.) W.Sm. (ab)		East	Linkletter et al. 1977 (Bailey 1910)
Nitzschia scutellum S.B.D.	*Nitzschia scutellum* (W.Smith) Wolle (ab)		East	Bailey 1913
Nitzschia seriata	*Pseudo-nitzschia seriata* (Cleve) H. Peragallo (ab)	*Nitzschia seriata* Cleve	East/Arctic	Fritz 1921 (Brunel 1962, Bursa 1963, Gran & Braarud 1935)

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Nitzschia sigma W. Smith	*Nitzschia sigma* (Kützing) W. Smith (ab)	*Sigmatella sigma* (Kützing) Frenguelli, *Homoeocladia sigma* (Kützing) Kuntze, *Synedra sigma* Kützing	East	Linkletter et al. 1977 (Bailey 1913, Bailey 1910, Fritz 1921, Thaler 2007, Trites 2005)
Nitzschia sigmoidea S.B.D.	*Nitzschia sigmoidea* (Nitzsch) W. Smith (ab)	*Bacillaria sigmoidea* Nitzsch, *Nitzschia elongata* Hassal, *Homoeocladia sigmoidea* (Nitzsch) Elmore, *Frustulia sigmoidea* (Nitzsch) Jenner, *Synedra sigmoidea* (Nitzsch) Kützing, *Cymbella sigmoidea* (Nitzsch) C. Agardh	East	Bailey 1913 (Bailey 1910)
Nitzschia sp.	*Nitzschia* sp.		Arctic	Bursa 1963 (Booth & Horner 1997)
Nitzschia subtilis (Ktz.) Grun.	*Nitzschia subtilis* Grunow (ab)		East (BoF)	Rawlence 1987
Nitzschia thermalis Ktz.	*Nitzschia thermalis* Kützing (ab)		East	Linkletter et al. 1977 (Bailey 1910)
Nitzschia tryblionella H.	*Nitzschia tryblionella* Hantzsch (ab)	*Tryblionella hantzschiana* var. *calida* (Grunov) Van Heurck, *Tryblionella hantzschiana* var. *minor* Playfair, *Tryblionella hantzschiana* var. *ovata* (Lagerstedt) Playfair, *Tryblionella hantzschiana* var. *victoriae* (Grunov) Playfair, *Tryblionella gracilis* W. Smith, *Tryblionella hantzschiana* var. *australica* Playfair, *Tryblionella hantzschiana* Grunow	East	Bailey 1913 (Bailey 1910)
Nitzschia tubicola	*Nitzschia tubicola* Grunow (ab)		East	Zwicker 1998
Nitzschia vermicularis Han.	*Nitzschia vermicularis* (Kützing) Hantzsch (ab)		East	Bailey 1913
Nitzschia vitrea Nonn.	*Nitzschia vitrea* G. Norman (ab)		East	Bailey 1913
Odontella aurita (Lyngbye) C.A. Agardh	*Odontella aurita* (Lyngbye) C.A. Agardh (ab)	*Diatoma auritum* Lyngbye, *Biddulphia aurita* (Lyngbye) Brébisson	East/West	Horner et al. 2005 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Bates & Strain 2006, McQuoid & Hobson 2001)

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Odontella longicruris (Greville) Hoban	*Odontella longicruris* (Greville) Hoban (ab)	*Biddulphia longicruris* var. *hyalina* (J.L.B. Schröder) E.E. Cupp, *Biddulphia hyalina* J.L.B. Schröder, *Biddulphia longicruris* Greville	East/West	Horner et al. 2005 (Sancetta & Calvert 1988, McQuoid & Hobson 2001, Carver & Mallet 2002)
Odontella mobiliensis	*Odontella mobiliensis* (J.W. Bailey) Grunow	*Zygoceros mobiliensis* J.W. Bailey, *Biddulphia mobiliensis* (J.W. Bailey) Grunow	West	Horner 2002
Odontella obtusa Kutz.	*Biddulphia obtusa* (Kützing) Ralfs (ab)	*Odontella obtusa* Kutz.	East	Martin et al. 1999
Odontella regia	*Odontella regia* (Schultze) Simonsen (ab)	*Biddulphia regia* (Schultze) Ostenfeld	East	Bérard-Therriault et al. 1999
Odontella sinensis (Greville) Grunow	*Odontella sinensis* (Greville) Grunow (ab)	*Biddulphia sinensis* Greville	East	Bérard-Therriault et al. 1999
Odontidium mesodon S.B.D.	*Diatoma mesodon* (Ehrenberg) Kützing (ab)	*Odontidium mesodon* S.B.D.	East	Bailey 1913
Odontidium mutabile S.	*Odontidium mutabile* W. Smith (ab)		East	Bailey 1910 (Bailey 1913)
Opephora cf. *horstiana* Witkowski	*O. mutabilis* (Grunow) Sabbe & Wyverman (ab)	*Opephora* cf. *horstiana* Witkowski	West (Effingham Inlet)	Hay et al. 2003
Opephora marina (Gregory) Petit	*Opephora marina* (Gregory) Petit (ab)	*Meridion marinum* Gregory	West (Effingham Inlet)	Hay et al. 2003
Opephora olsenii Møller	*Opephora mutabilis* (Grunow) Sabbe & Wyverman	*Opephora olsenii* Møller	West (Effingham Inlet)	Hay et al. 2003
Paralia marina	*Paralia sulcata* (Ehrenberg) Cleve	*Paralia marina* (W. Smith) Heiberg	East/West	Bates & Strain 2006 (McQuoid & Hobson 1997)
Paralia sulcata (Ehrenberg) Cleve	*Paralia sulcata* (Ehrenberg) Cleve (ab)	*Melosira sulcata* (Ehrenberg) Kützing, *Gallionella sulcata* Ehrenberg, *Paralia marina* (W.Smith) Heiberg, *Orthoseira marina* W.Smith	East/West	Horner et al. 2005 (Linkletter et al. 1977, Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1921, Trites 2005, McQuoid & Hobson 2001, Hay et al. 2003)
Pauliella taeniata	*Pauliella taeniata* (Grunow) F. E. Round & P. W. Basson (ab)		East/Arctic	Bérard-Therriault et al. 1999 (Riedel et al. 2003, Lovejoy et al. 2002)

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Petrodictyon gemma (Ehrenberg) D.G. Mann in Round et al.	*Petrodictyon gemma* (Ehrenberg) D.G. Mann (ab)	*Surirella gemma* (Ehrenberg)	East	Thaler 2007
Pinnularia acuta W. Sm.	*Pinnularia acuta* W.Smith (ab)		East	Bailey 1913
Pinnularia borealis Ehrenberg	*Pinnularia borealis* Ehrenberg (ab)	*Pinnularia chilensis* Bleisch, *Navicula borealis* (Ehrenberg) Kützing, *Schizonema boreale* (Ehrenberg) Kuntze	Arctic	Antoniades et al. 2005
Pinnularia cyprinus	*Pinnularia cyprinus* C.G. Ehrenberg (ab)		East	Bailey 1913
Pinnularia divergens W.Smith	*Pinnularia divergens* W.Smith (ab)		Arctic	Antoniades et al. 2005
Pinnularia intermedia (Lagerstedt) Cleve	*Pinnularia intermedia* (Lagerstedt) Cleve (ab)		Arctic	Antoniades et al. 2005
Pinnularia interrupta W.Smith	*Pinnularia interrupta* W.Smith (ab)		Arctic	Antoniades et al. 2005
Pinnularia major (Kutz) Rabenhorst	*Pinnularia major* (Kutz) Rabenhorst (ab)		East	Ginn (pers. comm.)[1]
Pinnularia nobilis Ehr.	*Pinnularia nobilis* Ehrenberg (ab)	*Navicula nobilis* Ehrenberg	East	Bailey 1913
Pinnularia obscura Krasske	*Pinnularia obscura* Krasske (ab)		Arctic	Antoniades et al. 2005
Pinnularia ovalis Hilse	*Diploneis ovalis* (Hilse) Cleve (ab)	*Pinnularia ovalis* Hilse	East	Patrick & Reimer 1966
Pinnularia quadratarea var. *bicontracta*	*Pinnularia quadratarea* var. *bicontracta* (E.V. Østrup) H.H. Gran		Arctic	Riedel et al. 2003
Pinnularia quadratarea var. *constricta*	*Pinnularia quadratarea* var. *constricta* (Østrup) Heiden (ab)	*Navicula pinnularia* var. *constricta* Østrup	Arctic	Riedel et al. 2003
Pinnularia semiinflata	*Pinnularia semiinflata* (E.V. Østrup) H.H. Gran (ab)		Arctic	Riedel et. al. 2003 (Booth & Horner 1997)
Pinnularia sp.	*Pinnularia* sp.		East	Brunel 1962
Pinnularia spp.	*Pinnularia* spp.		Arctic	Riedel et al. 2003
Pinnularia subrostrata (A.Cleve) Cleve-Euler	*Pinnularia subrostrata* (A.Cleve) Cleve-Euler (ab)	*Pinnularia divergentissima* var. *subrostrata* A. Cleve, *Pinnularia divergentissima* var. *wulffii* J.B. Petersen	Arctic	Antoniades et al. 2005

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Pinnularia viridis Ktz.	*Pinnularia viridis* (Nitzsch) Ehrenberg (ab)	*Navicula viridis* (Nitzsch) Ehrenberg, *Frustulia viridis* (Nitzsch) Kützing, *Bacillaria viridis* Nitzsch, *Navicula viridis* (Nitzsch) Kützing, *Schizonema viride* (Nitzsch) Kuntze	East	Linkletter 1977 (Bailey 1913)
Plagiogramma sp.	*Plagiogramma sp.*		Arctic	Bursa 1963
Plagiogrammopsis vanheurckii (Grunow) Hasle, von Stosch, & Syvertsen	*Plagiogramma vanheurckii* Grunow (ab)		East/West	Horner (pers. comm.)[3] (Trites 2005, McQuoid & Hobson 2001)
Plagiotropis longa	*Plagiotropis longa* (Cleve) Kuntze (ab)		East	Bérard-Therriault et al. 1999
Plagiotropis vanheurkii (Grunow) Cleve	*Tropidoneis vanheurckii* (Grunow) Cleve (ab)	*Plagiotropis vanheurckii* Grunow	East	Trites 2005
Planktoniella sol (Wallich) Schütt	*Planktoniella sol* (Wallich) Schütt (ab)	*Coscinodiscus sol* Wallich, *Planktoniella wolterecki* Schimper	East/West (US)	Cupp 1943 (Carver & Mallet 2002)
Planothidium delicatulum (Kützing) Round & Bukhtiyarova	*Planothidium delicatulum* (Kützing) Round & L. Bukhtiyarova (ab)	*Microneis delicatula* (Kützing) Cleve, *Achnanthes delicatula* (Kützing) Grunow, *Achnanthes delicatula* (Kützing) Brun, *Achnanthes delicatula* (Kützing) Grunow, *Falcatella delicatula* (Kützing) Rabenhorst, *Achnanthidium delicatulum* Kützing, *Achnantheiopsis delicatula* (Kützing) Lange-Bertalot	West (Effingham Inlet)	Hay et al. 2003
Planothidium cf. *engelbrechtii* (Cholnoky) Round & Bukhtiyarova	*Planothidium engelbrechtii* (Cholnoky) Round & Bukhtiyarova (ab)		West (Effingham Inlet)	Hay et al. 2003

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Planothidium lanceolatum (Brébisson ex Kützing) Lange-Bertalot	*Planothidium lanceolatum* (Brébisson ex Kützing) Lange-Bertalot (ab)	*Planothidium lanceolatum* (Brébisson ex Kützing) F.E. Round & L. Bukhtiyarova, *Microneis lanceolata* (Brébisson in Kützing) Frenguelli, *Achnanthes lanceolata* (Brébisson ex Kützing) Grunow, *Achnanthes lanceolata* (Brébisson ex Kützing) Grunow, *Achnanthidium lanceolatum* Brébisson ex Kützing, *Achnantheiopsis lanceolata* (Brébisson ex Kützing) Lange-Bertalot	West (Effingham Inlet)	Hay et al. 2003
Pleurosigma acuminatum	*Gyrosigma acuminatum* (Kützing) Rabenhorst (ab)	*Pleurosigma acuminatum* (Kützing) Grunow	East	Linkletter et al. 1977 (Bailey 1913)
Pleurosigma aestuarii W. Smith	*Pleurosigma aestuarii* (Brébisson ex Kützing) W. Smith (ab)	*Navicula aestuarii* Brébisson ex Kützing	East	Linkletter et al. 1977 (Bailey 1910)
Pleurosigma affinis Grun.	*Pleurosigma affinis* Grun. (ab)		East	Bailey 1913
Pleurosigma allenuatum	*Pleurosigma allenuatum*		East	Linkletter et al. 1977
Pleurosigma angulatum (Quekett) W. Smith	*Pleurosigma angulatum* W. Smith (ab)		East	Linkletter et al. 1977 (Bailey 1910, Fritz 1921, Trites 2005, Bates & Strain 2006)
Pleurosigma angulatum var. *strigosa* (W. Smith) Van Heurck	*Pleurosigma strigosum* W. Smith (ab)	*Pleurosigma angulatum* var. *strigosum* (W. Smith) Van Heurck	East	Martin et al. 2001
Pleurosigma arcuatum Donkin	*Pleurosigma arcuatum* Donkin (ab)		East	Bailey 1913
Pleurosigma balticum	*Gyrosigma balticum* (Ehrenberg) Rabenhorst (ab)	*Pleurosigma balticum* (Ehrenberg) W. Smith	East	Fritz 1921 (Bailey 1910, Bailey 1913)
Pleurosigma decorum Wm. Smith	*Pleurosigma decorum* Wm. Smith (ab)		East	Linkletter et al. 1977
Pleurosigma delicatulum W.S.	*Pleurosigma delicatulum* W.Smith (ab)		East	Bailey 1913

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Pleurosigma elongatum W. Smith	*Pleurosigma elongatum* W. Smith (ab)	*Pleurosigma angulatum* var. *elongatum* (W. Smith) van Heurck, *Gyrosigma elongatum* (W. Smith) Griffith & Henfrey, *Gyrosigma elongatum* (W. Smith) G.S. West	East (BoF)/West (US)	Linkletter et al. 1977 (Cupp 1943, Carver & Mallet 2002)
Pleurosigma eximium (Thwaites) Cleve & Grunow	*Pleurosigma eximium* (Thwaites) Cleve & Grunow (ab)		East	Patrick & Reimer 1966
Pleurosigma fasciola	*Gyrosigma fasciola* (Ehrenberg) J.W. Griffith & Henfrey (ab)	*Pleurosigma fasciola* (Ehrenberg) W. Smith	East	Fritz 1921 (Bailey 1910, Bailey 1913)
Pleurosigma formosum W. Smith	*Pleurosigma formosum* W. Smith (ab)	*Pleurosigma australicum* Witt, *Pleurosigma tahitense* Witt	East	Linkletter et al. 1977 (Bailey 1910, Bailey 1913, Bailey 1910, Fritz 1921, Brunel 1962)
Pleurosigma hamuliferum Brun and Tempère	*Pleurosigma hamuliferum* Brun and Temp. (ab)		West (US)	Cupp 1943
Pleurosigma intermedium W. Smith	*Pleurosigma intermedium* W. Smith (ab)	*Pleurosigma nubecula* var. *intermedium* (W. Smith) Cleve, *Pleurosigma nubecula* W. Smith, *Pleurosigma intermedium* var. *nubecula* (W. Smith) Grunow ex Van Heurck	East (BoF)	Cardinal et al. 1989
Pleurosigma macrum W.S.	*Pleurosigma macrum* W.Smith (ab)		East	Bailey 1913
Pleurosigma nicobaricum Grunow	*Pleurosigma nicobaricum* Grun. (ab)		West (US)	Cupp 1943
Pleurosigma normanii Ralfs	*Pleurosigma normanii* Ralfs (ab)	*Pleurosigma affine* Grunow	East/West (US)	Cupp 1943 (Carver & Mallet 2002)
Pleurosigma sp.	*Pleurosigma* sp.		East/Arctic	Bursa 1963 (Gran & Braarud 1935)
Pleurosigma W. Smith spp.	*Pleurosigma* W. Smith spp.		Arctic	Lovejoy et al. 2002
Pleurosigma spenceri Grun.	*Pleurosigma spenceri* (Quek.) W. Smith		East	Bailey 1910
Pleurosigma strigilis W. Smith	*Pleurosigma strigilis* Wm. Smith (ab)		East (BoF)	Linkletter et al. 1977 (Bailey 1910, Bailey 1913)
Pleurosigma strigosum W. Smith	*Pleurosigma strigosum* W. Smith (ab)	*Pleurosigma angulatum* var. *strigosum* (W.Smith) Van Heurk	East	Linkletter et al. 1977 (Bailey 1910, Fritz 1921, Bailey 1913)
Pleurosigma stuxbergii	*Pleurosigma stuxbergii* Cleve & Grunow (ab)		Arctic	Riedel et al. 2003 (Booth & Horner 1997)

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Porosira glacialis Jorgensen	*Porosira glacialis* (Grunow) Jorgensen (ab)	*Podosira hormoides* var. *glacialis* Grunow, *Podosira glacialis* (Grunow) Cleve, *Lauderia glacialis* (Grunow) Gran, *Porosira antarctica* O.G. Kozlova	East/Arctic	Bursa 1963 (Lovejoy et al. 2002, Gran & Braarud 1935, Booth & Horner 1997)
Proboscia alata	*Proboscia alata* (Brightwell) Sündstrom (ab)	*Rhizosolenia alata* Brightwell, *Rhizosolenia alata* f. *gracillima* (Cleve) Gran, *Rhizosolenia alata* f. *Genuina* Gran	East/West	Bérard-Therriault et al. 1999 (Horner 2002)
Proboscia eumorpha	*Proboscia eumorpha* K. Takahashi, R. Jordan & J. Priddle (ab)	*Rhizosolenia obtusa* Hensen	East	Martin & LeGresley 2008 (Carver & Mallet 2002)
Pseudogomphonema arcticum	*Pseudogomphonema arcticum* (Grunow) L.K. Medlin (ab)		Arctic	Riedel et al. 2003 (Lovejoy et al. 2002)
Pseudo-nitzschia americana (G.R.Hasle) G.A. Fryxell	*Pseudo-nitzschia americana* (G.R. Hasle) G.A. Fryxell (ab)	*Nitzschia americana* G.R.Hasle	East/West	Martin (pers. comm.)[2] (Horner pers. comm.)[3]
Pseudo-nitzschia australis Frenguelli	*Pseudo-nitzschia australis* Frenguelli (ab)	*Nitzschia pseudoseriata* Hasle	West	Horner (pers. comm.)[3]
Pseudo-nitzschia delicatissima (Cleve) Heiden	*Pseudo-nitzschia delicatissima* (Cleve) Heiden (ab)	*Nitzschia delicatissima* Cleve, *Nitzschia actydrophila* Hasle	East/West/Arctic	Hargraves & Maranda 2002 (Chang et al. 2007, Bérard-Therriault et al. 1999, Lovejoy et al. 2002)
Pseudo-nitzschia fraudulenta (Cleve) Hasle	*Pseudo-nitzschia fraudulenta* (Cleve) G.R. Hasle (ab)	*Nitzschia fraudulenta* Cleve, *Pseudo-nitzschia seriata* var. *fraudulenta* (Cleve) H. Peragallo	East/West	Hargraves & Maranda 2002 (Martin & LeGresley 2008)
Pseudo-nitzschia granii (Hasle) Hasle & Syvertsen	*Pseudo-nitzschia granii* (G.R. Hasle) G.R. Hasle (ab)	*Nitzschia granii* G.R. Hasle	Arctic	Lovejoy et al. 2002
Pseudo-nitzschia multiseries (Hasle) Hasle	*Pseudo-nitzschia multiseries* (Hasle) Hasle (ab)	*Nitzschia pungens* f. *multiseries* G.R. Hasle, *Pseudo-nitzschia pungens* f. *multiseries* Hasle	East/West	Hargraves & Maranda 2002 (Martin [pers. comm.][2], Bérard-Therriault et al. 1999)
Pseudo-nitzschia pseudodelicatissima (Hasle) Hasle	*Pseudo-nitzschia pseudodelicatissima* (Hasle) Hasle (ab)	*Nitzschia delicatula* Hasle, *Nitzschia pseudodelicatissima* G.R. Hasle	East/West/Arctic	Horner et al. 2005 (Martin [pers. comm.][2], Hargraves & Maranda 2002, Bérard-Therriault et al. 1999, Booth & Horner 1997)

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Pseudo-nitzschia pungens (Grunow) Hasle	*Pseudo-nitzschia pungens* (Grunow ex Cleve) Hasle (ab)	*Nitzschia pungens* Grunow ex Cleve	East/West	Hargraves & Maranda 2002 (Martin [pers. comm.][2], Bérard-Therriault et al. 1999)
Pseudo-nitzschia seriata (Cleve) H.Peragallo	*Pseudo-nitzschia seriata* (Cleve) H.Peragallo (ab)	*Nitzschia seriata* Cleve	East/West	Hobson (pers. comm.)[5] (Chang et al. 2007, Kaczmarska et al. 2007, Bérard-Therriault et al. 1999)
Pseudo-nitzschia seriata f. *obtusa*	*Pseudo-nitzschia obtusa* (Hasle) Hasle & Lundholm (ab)	*Pseudo-nitzschia seriata* f. *obtusa* (Hasle) Hasle	East	Bérard-Therriault et al. 1999
Pseudo-nitzschia spp.	*Pseudo-nitzschia* spp.		Arctic	Lovejoy et al. 2002
Pseudo-nitzschia subpacifica	*Pseudo-nitzschia subpacifica* (G.R. Hasle) G.R. Hasle (ab)	*Nitzschia subpacifica* G.R. Hasle	East/West	Martin & LeGresley 2008 (Horner [pers. comm.][3])
Punctastriata sp.	*Punctastriata* sp.		East	Bérard-Therriault et al. 1999
Raphoneis sp.	*Rhaphoneis* sp.		West	McQuoid & Hobson 2001
Rhaphoneis amphiceros Ehrenberg	*Rhaphoneis amphiceros* (Ehrenberg) Ehrenberg (ab)	*Rhaphoneis lanceolata* Ehrenberg, *Doryphora amphiceros* (Ehrenberg) Kützing, *Cocconeis amphiceros* Ehrenberg, *Rhaphoneis rhombus* Ehrenberg, *Rhaphoneis amphiceros* var. *rhombica* Grunow ex Van Heurck	East/West	Linkletter et al. 1977 (Bailey 1913, Bailey 1910)
Rhaphoneis amphiceros v. *elongata* Perag. & Perag.	*Rhaphoneis amphiceros* var. *elongata* Perag. & Perag (ab)		East	Rawlence 1987
Rhaphoneis margaritalimbata Mertz	*Rhaphoneis margaritalimbata* Mertz (ab)		West (Effingham Inlet)	Hay et al. 2003
Rhabdonema adriaticum Küzting	*Rhabdonema adriaticum* Küzting (ab)		East	Bailey 1913
Rhabdonema arcuatum (Lyngbye) Kützing	*Rhabdonema arcuatum* (Lyngbye) Kützing (ab)	*Diatoma arcuatum* Lyngbye	East/Arctic	Linkletter et al. 1977 (Bailey 1913, Bailey 1910, Brunel 1962, Bursa 1963)
Rhabdonema spp.	*Rhabdonema* spp.		East/West	Martin (pers. comm.)[2] (McQuoid & Hobson 2001)
Rhizosolenia acuminata (H. Péragello) Gran	*Rhizosolenia acuminata* (H. Péragello) Gran (ab)	*Rhizosolenia temperei* var. *acuminata* H. Peragallo	West (US)	Cupp 1943

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Rhizosolenia alata Brightwell	*Proboscia alata* (Brightwell) Sündstrom (ab)	*Rhizosolenia alata* Brightwell	East/Arctic	Bursa 1963 (Gran & Braarud 1935)
Rhizosolenia alata form *curvirostris* Gran	*Rhizosolenia alata* form *curvirostris* Gran (ab)		West (US)	Cupp 1943
Rhizosolenia alata form *gracillima* (Cleve) Grun	*Proboscia alata* (Brightwell) Sündstrom (ab)	*Rhizosolenia alata* var. *gracillima* (Cleve) Grunow ex Van Heurck, *Rhizosolenia gracillima* Cleve	East (BoF)/West (US)	Cupp 1943
Rhizosolenia alata form *indica* (H. Péragallo) Gran	*Rhizosolenia alata* form *indica* (H. Péragallo) Gran (ab)	*Rhizosolenia indica* H. Peragallo	West (US)	Cupp 1943
Rhizosolenia alata form *inermis* (Castracane) Hustedt	*Rhizosolenia alata* form *inermis* (Castr.) Hust. (ab)		West (US)	Cupp 1943
Rhizosolenia bergonii H. Péragallo	*Rhizosolenia bergonii* H. Péragallo (ab)	*Rhizosolenia amputata* Ostenfeld	West (US)	Cupp 1943
Rhizosolenia calcar avis M. Schultze	*Pseudosolenia calcar-avis* (Schultze) Sundström (ab)	*Rhizosolenia calcar avis* M. Schultze	West (US)	Cupp 1943
Rhizosolenia castracanei H. Péragallo	*Guinardia flaccida* (Castracane) H. Peragallo	*Rhizosolenia castracanei* Cleve	West (US)	Cupp 1943
Rhizosolenia delicatula	*Guinardia delicatula* (Cleve) Hasle	*Rhizosolenia delicatula* Cleve	Arctic	Booth & Horner 1997
Rhizosolenia faeroensis Ostenfeld	*Rhizosolenia faeroensis* Ostenfeld (ab)		East (BoF)	Linkletter et al. 1977 (Fritz 1921, Brunel 1962)
Rhizosolenia fragilissima	*Dactyliosolen fragilissimus* (Bergon) G.R. Hasle	*Rhizosolenia fragilissima* Bergon	East/West	Brunel 1962 (Gran & Braarud 1935, Horner 2002)
Rhizosolenia fragilissima var. *bergonii*	*Rhizosolenia fragilissima* var. *bergonii* A. Cleve-Euler		East	Brunel 1962
Rhizosolenia fragilissima var. *faeroensis*	*Rhizosolenia fragilissima* var. *faeroensis* (C.E.H. Ostenfeld) A. Cleve-Euler		East	Brunel 1962
Rhizosolenia hebetata Bailey	*Rhizosolenia hebetata* J.W. Bailey (ab)	*Rhizosolenia hebatata* f. *hiemalis* Gran	East/West/Arctic	Linkletter et al. 1977 (Fritz 1921, Brunel 1962, Bursa 1963, Gran & Braarud 1935, Bates & Strain 2006)
Rhizosolenia hebetata f. *hiemalis*	*Rhizosolenia hebetata* J.W. Bailey	*Rhizosolenia hebetata* f. *hiemalis* Gran	East	Brunel 1962

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Rhizosolenia hebetata f. *semispina*	*Rhizosolenia hebetata* f. *semispina* (Hensen) Gran (ab)	*Rhizosolenia semispina* Hensen, *Rhizosolenia styliformis* var. *semispina* (Hensen) G. Karsten	East/West	Hobson (pers. comm.)[5] (Bérard-Therriault et al. 1999, Brunel 1962, Bates & Strain 2006)
Rhizosolenia imbricata	*Rhizosolenia imbricata* Brightwell (ab)	*Rhizosolenia shrubsolei* Cleve, *Rhizosolenia imbricata* var. *striata* (Greville) Grunow, *Rhizosolenia imbricata* var. *shrubsolei* (Cleve) Schröder	East	Bérard-Therriault et al. 1999 (Gran & Braarud 1935, Bates & Strain 2006)
Rhizosolenia obtusa	*Proboscia eumorpha* K. Takahashi, R. Jordan & J. Priddle (ab)	*Rhizosolenia obtusa* Hensen	East	Fritz 1921
Rhizosolenia pungens	*Rhizosolenia setigera* f. *pungens* (Cleve-Euler) Brunel (ab)	*Rhizosolenia pungens* Cleve-Euler	East	Bérard-Therriault et al. 1999 (Brunel 1962, Bates & Strain 2006)
Rhizosolenia robusta Norman	*Neocalyptrella robusta* (G. Norman ex Ralfs) D.U. Hernández-Becerril & M. E. Meave del Castillo (ab)	*Rhizosolenia robusta* G. Norman ex Ralfs	East/West (US)	Cupp 1943
Rhizosolenia setigera Brightwell	*Rhizosolenia setigera* Brightwell (ab)	*Rhizosolenia japonica* Castracane, *Rhizosolenia hensenii* Schütt	East/West	Horner et al. 2005 (Bailey 1913, Bailey 1910, Linkletter et al. 1977, Sancetta & Calvert 1988, Brunel 1962, Gran & Braarud 1935, Bates & Strain 2006, Hay et al. 2003)
Rhizosolenia setigera f. *pungens*	*Rhizosolenia setigera f. pungens* (Cleve-Euler) Brunel (ab)	*Rhizosolenia pungens* Cleve-Euler	East	Brunel 1962
Rhizosolenia shrubsolei	*Rhizosolenia imbricata* Brightwell (ab)	*Rhizosolenia shrubsolei* Cleve	East	Fritz 1921
Rhizosolenia styliformis	*Rhizosolenia styliformis* Brightwell (ab)	*Rhizosolenia styliformis* var. *polydactyla* van Heurck, *Rhizosolenia styliformis* var. *longispina* Hustedt	East/Arctic	Bursa 1963 (Gran & Braarud 1935, Carver & Mallet 2002)
Rhizosolenia sp.	*Rhizosolenia* sp.		West	McQuoid & Hobson 1997
Rhizosolenia spp.	*Rhizosolenia* spp.		West	Sancetta & Calvert 1988 (McQuoid & Hobson 2001)
Rhoicosphenia curvata (Kutzing) Grunow ex Rabh.	*Rhoicosphenia abbreviata* (C. Agardh) Lange-Bertalot	*Rhoicosphenia curvata* (Kützing) Grunow	West	McQuoid & Hobson 2001 (Bailey 1913)

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Rhopalodia gibba (Ehrenberg) Müller	*Rhopalodia gibba* (Ehrenberg) O.F. Müller (ab)	*Eunotia gibba* (Ehrenberg) Ehrenberg, *Navicula gibba* Ehrenberg, *Cystopleura gibba* (Ehrenberg) Kuntze, *Epithemia ventricosa* var. *gibba* (Ehrenberg; Ehrenberg) J. Schumann, *Frustulia gibba* (Ehrenberg) Jenner, *Epithemia gibba* (Ehrenberg) Kützing, *Pinnularia gibba* (Ehrenberg) Ehrenberg, *Schizonema gibbum* (Ehrenberg) Kuntze	East	Linkletter et al. 1977
Rhopalodia musculus	*Rhopalodia musculus* (Kützing) O.F. Müller (ab)	*Rhopalodia gibberula* var. *musculus* (Kützing) Muschler, *Epithemia musculus* Kutzing, *Cystopleura musculus* (Kützing) Kuntze, *Eunotia westermanni* var. *musculus* (Kützing) G.L. Rabenhorst, *Rhopalodia gibberula* var. *musculus* (Kützing) Cleve-Euler	East	Linkletter et al. 1977
Rhopalodia spp.	*Rhopalodia* spp.		West	McQuoid & Hobson 2001
Rhopalodia turgida	*Rhopalodia turgida*		East (BoF)	Linkletter et al. 1977
Rhopalodia zebra	*Rhopalodia zebra*		East	Linkletter et al. 1977
Schizonema crucigerum W. Sm.	*Haslea crucigera* (W. Smith) Simonsen (ab)	*Schizonema crucigera* W. Sm.	East	Bailey 1910
Schröderella delicatula Pavillard	*Detonula pumila* (Castracane) Gran (ab)	*Detonula schroederi* Gran, *Lauderia schroederi* Bergon, *Detonula delicatula* (H. Peragallo) Gran, *Lauderia delicatula* H. Peragallo, *Schröderella schroederi* (Bergon) Pavillard	West	Cupp 1943 (Horner 2002)
Scoliopleura tumida (deBrébisson) Rabenhorst	*Scoliopleura tumida (Brébisson ex Kutzing) Rabenhorst (ab)*		East (BoF)	Linkletter et al. 1977

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Sellaphora pupula (Kütz.) Mereschkovsky	*Sellaphora pupula* (Kützing) Mereschkovsky (ab)	*Navicula pupula* Kützing, *Schizonema pupula* (Kützing) Kuntze	East (BoF)	Ginn (pers. comm.)[1]
Skeletonema costatum	*Skeletonema costatum* (Greville) Cleve (ab)	*Melosira costata* Greville	East/West/Arctic	Bailey 1913 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, Lovejoy et al. 2002, Bates & Strain 2006, McQuoid & Hobson 1997, McQuoid & Hobson 2001)
Skeletonema subsalsum	*Skeletonema subsalsum* (A.Cleve) Bethge (ab)		East	Brunel 1962
Stauroneis acuta W.S.	*Stauroneis kochii* Pantocsek (col)	*Stauroneis acuta* W. Smith	East	Bailey 1913
Stauroneis anceps Ehr.	*Stauroneis anceps* Ehrenberg (ab)	*Schizonema anceps* (Ehrenberg) Kuntze, *Stauroneis anceps* var. *amphicephala* (Kützing) Cleve, *Stauroneis anceps* var. *amphicephala* (Kützing) van Heurck, *Stauroneis amphicephala* Kützing, *Stauroneis anceps* f. *gracilis* (Ehrenberg) Cleve, *Navicula anceps* (Ehrenberg) Mann	East	Bailey 1913 (Bailey 1910)
Stauroneis obliqua	*Stauroneis obliqua* Gregory (ab)		East	Linkletter et al. 1977 (Bailey 1910)
Stauroneis phoenicenteron (Nitzsch) Ehrenberg	*Stauroneis phoenicenteron* (Nitzsch) Ehrenberg (ab)	*Stauroneis phoenicenteron* var. *genuina* P.T. Cleve, *Navicula phoenicenteron* (Nitzsch) Ehrenberg, *Cymbella phoenicenteron* (Nitsch) C. Agardh, *Bacillaria phoenicenteron* Nitzsch, *Stauroneis nobilis* f. *alabamae* (Heiden) A. Cleve, *Schizonema phoenicenterum* (Ehrenberg) Kuntze	East/Arctic	Antoniades et al. 2005 (Bailey 1913, Bailey 1910)

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Stauroneis smithii Grunow	*Stauroneis smithii* Grunow (ab)	*Stauroneis linearis* Ehrenberg sensu W. Smith, *Pleurostaurum smithii* (Grunow) Grunow	East (BoF)	Rawlence 1987
Stauroneis spicula	*Haslea spicula* (Hickie) L. Bukhtiyarova (ab)	*Stauroneis spicula* Hickie	East	Bailey 1910
Staurosira construens Ehrenberg	*Staurosira construens* Ehrenberg (ab)	*Fragilaria construens* (Ehrenberg) Grunow, *Staurosira venter* var. *construens* (Ehrenberg) Cleve & Möller, *Nematoplata construens* (Ehrenberg) Kuntze	East	Ginn (pers. comm.)[1]
Stauropsis septentrionalis	*Navicula septentrionalis* (Østrup) Cleve (ab)	*Stauropsis septentrionalis* Meunier	East	Brunel 1962
Staurosirella sp.	*Staurosirella* sp.		West	McQuoid & Hobson 2001
Stellarima stellaris (Roper) Hasle	*Stellarima stellaris* (Roper) G.R. Hasle & P.A. Sims (ab)	*Coscinodiscus stellaris* Roper	East (BoF)/West	Horner (pers. comm.)[3] (Sancetta & Calvert 1988)
Stephanopyxis appendiculata Ehrenberg	*Stephanopyxis appendiculata* (C.G. Ehrenberg) C.G. Ehrenberg (ab)		East (BoF)	Linkletter et al. 1977
Stephanopyxis nipponica Gran & Yendo	*Stephanopyxis nipponica* Gran & Yendo (ab)		East/West	Horner et al. 2005 (Carver & Mallet 2002)
Stephanopyxis turris (Greville et Arnott) Ralfs	*Stephanopyxis turris* (Greville) Ralfs ex Pritchard (ab)	*Creswellia turris* Greville & Arnott	East/West	Sancetta & Calvert 1988 (McQuoid & Hobson 2001, Carver & Mallet 2002)
Streptotheca thamensis Shrubsole	*Helicotheca tamesis* (Shrubsole) Ricard (ab)		West (US)	Cupp 1943
Striatella delicatula (Kützing) Grunow	*Striatella delicatula* (Kützing) Grunow ex Van Heurck (ab)		West (US)	Cupp 1943
Striatella unipunctata (Lyngbye) Agardh	*Striatella unipunctata* (Lyngbye) C. Agardh (ab)	*Fragilaria unipunctata* Lyngbye	East/West	Linkletter et al. 1977 (Bailey 1913, Bailey 1910, Brunel 1962, Bates & Strain 2006)
Surirella biseriata W.Sm.	*Surirella biseriata* Brébisson (ab)	*Suriraya biseriata* (Brébisson) Pfitzer	East	Bailey 1910
Surirella constricta	*Surirella constricta* W. Smith (ab)		East	Bailey 1910
Surirella craticula Ehr.	*Surirella craticula* (C.G. Ehrenberg) C.G. Ehrenberg		East	Bailey 1913

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Surirella cruciata A.S.	*Surirella cruciata* Schmidt (ab)		East	Bailey 1913
Surirella crumena Breb.	*Surirella crumena* de Brébisson ex Kützing (ab)		East	Bailey 1913
Surirella elegans Ehr.	*Surirella elegans* Ehrenberg (ab)		East	Bailey 1913
Surirella fastuosa var. *recedens* (A. Schmidt) Cleve	*Surirella fastuosa* var. *recedens* (A. Schm.) Cl. (ab)		West (US)	Cupp 1943
Surirella febigerii Lewis	*Surirella febigerii* Lewis (ab)		East	Bailey 1913
Surirella gemma (Ehrenberg) Kützing	*Surirella gemma* (Ehrenberg) Kützing (col)	*Navicula gemma* Ehrenberg	East	Linkletter et al. 1977 (Bailey 1913)
Surirella minuta Breb.	*Surirella minuta* Brébisson (ab)		East	Bailey 1913 (Bailey 1910)
Surirella moleriana Grunow	*Surirella molleriana* Grunow (ab)		East	Linkletter et al. 1977 (Bailey 1913, Bailey 1910)
Surirella ovalis deBrébisson	*Surirella ovalis* Brébisson (ab)		East	Linkletter et al. 1977 (Bailey 1913, Bailey 1910)
Surirella pulchella	*Surirella pulchella* L.A. Brébisson (ab)		East (BoF)	Linkletter et al. 1977
Surirella smithii Ralfs	*Surirella smithii* Ralfs (ab)		East (BoF)	Poulin et al. 1987
Surirella splendida Kütz.	*Surirella splendida* Kützing (ab)		East	Bailey 1913 (Bailey 1910)
Surirella spp.	*Surirella* spp.		East	Thaler 2007
Surirella striatula Turp.	*Surirella striatula* P.J. Turpin (ab)	*Navicula striatula* (Turpin) Ehrenberg, *Novilla striatula* (Turpin) Heiberg, *Suriraya striatula* (Turpin) Pfitzer	East	Bailey 1913 (Bailey 1910)
Syndendrium diadema	*Chaetoceros diadema* (Ehrenberg) Gran (ab)	*Syndendrium diadema* Ehrenberg	East	Brunel 1962
Synedra acus Ktz.	*Ulnaria acus* (Kützing) M. Aboal (ab)	*Synedra acus* Kützing	East	Bailey 1913 (Bailey 1910)
Synedra acus var. *radians* (Kütz) Hustedt	*Ulnaria delicatissima* var. *angustissima* (Grunow) M. Aboal & P.C. Silva (ab)	*Synedra acus* var. *radians* (Kützing) Hustedt	East	Bailey 1910
Synedra fasciculata (Agardh) Kützing	*Synedra fasciculata* (Agardh) Kützing		East	Rawlence 1987
Synedra gaillionii (Bory) Ehrenberg	*Catacombus gaillonii* (Bory) D.M.Williams & Round (ab)	*Synedra gaillonii* (Bory de Saint-Vincent) Ehrenberg	East (BoF)	Linkletter et al. 1977
Synedra lunaris Ehr.	*Synedra lunaris* Ehrenberg (ab)		East	Linkletter et al. 1977 (Bailey 1913)

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Synedra radians Kützing	*Synedra radians* Kützing (ab)		East	Linkletter et al. 1977 (Bailey 1910, Bailey 1913)
Synedra salina	*Synedra ulna* var. *salina* (W. Smith) W. Smith	*Synedra salina* W. Smith	East	Bailey 1910 (Bailey 1913)
Synedra sp.	*Synedra* sp.		Arctic	Bursa 1963
Synedra ulna (Nitzsch) Ehrenberg	*Ulnaria ulna* (Nitzsch) P. Compère (ab)	*Synedra ulna* (Nitzsch) Ehrenberg (ab)	East	Linkletter et al. 1977 (Brunel 1962, Bailey 1910, Bailey 1913)
Synedra ulna var. *contrata* Ostr.	*Synedra ulna* var. *contracta* Østrup		East	Zwicker 1998
Synedropsis hyperborea	*Synedropsis hyperborea* (Grunow) Hasle, Medlin & Syvertsen (ab)	*Synedra hyperborea* Grunow, *Synedra hyperborea* var. *rostellata* Grunow, *Synedra hyperborea* var. *flexuosa* Grunow	Arctic	Riedel et al. 2003 (Lovejoy et al. 2002, Booth & Horner 1997)
Tabellaria fenestrata K.B.	*Tabellaria fenestrata* (Lyngbye) Kützing (ab)		East	Bailey 1913 (Bailey 1910)
Tabellaria flocculosa Kutz.	*Tabellaria flocculosa* (Roth) Kützing (ab)	*Conferva flocculosa* Roth, *Striatella flocculosa* (Roth) Kuntze, *Bacillaria flocculosa* (Roth) Leiblein	East/West (Effingham Inlet)	Hay et al. 2003 (Bailey 1913, Cattaneo et al. 2004)
Tabellaria spp.	*Tabellaria* spp.		East/West	Martin (pers. comm.)[2] (McQuoid & Hobson 2001)

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Tabularia fasciculata (Agardh) Williams & Round	*Tabularia fasciculata* (C. Agardh) D.M. Williams & Round (ab)	*Fragilaria tabulata* (C.Agardh) Lange-Bertalot, *Fragilaria fasciculata* (C. Agardh) Lange-Bertalot, *Synedra tabulata* var. *fasciculata* (C. Agardh), *Synedra tabulata* (C. Agardh) Kützing, *Diatoma tabulata* C. Agardh, *Diatoma tabulata* C.A. Agardh, *Diatoma tabulatum* C. Agardh, *Exilaria fasciculata* (C. Agardh) Greville, *Lyngbyea fasciculata* (C. Agardh) Sommerfelt, *Echinella fasciculata* (Agardh) Jurgens, *Diatoma fasciculata* C.A. Agardh, *Synedra fasciculata* (Agardh) Kützing, *Tabularia tabulata* (C. Agardh) Snoeijs	East/West (Effingham Inlet)	Hay et al. 2003
Tabularia investiens (W. Smith) Williams & Round	*Tabularia investiens* (W. Smith) D.M. Williams & Round (ab)	*Synedra investiens* W.Smith	West (Effingham Inlet)	Hay et al. 2003 (Bérard-Therriault et al. 1999)
Tabularia tabulata (Kutzing) D.M. Williams & F.E. Round	*Tabularia tabulata* (C. Agardh) D.M. Williams & Round (col)		East	Zwicker 1998
Thalassionema nitzschioides Grunow	*Thalassionema nitzschioides* (Grunow) Mereschkowsky (ab)	*Thalassiothrix nitzschioides* var. *javanica* Grunow, *Synedra nitzschioides* Grunow, *Thalassiothrix nitzschioides* (Grunow) Grunow, *Thalassiothrix curvata* Castracane, *Synedra nitzschioides* var. *minor* Cleve, *Thalassiothrix fraunfeldii* var. *Nitzschioides* (Grunow) Jörgensen	East/West/Arctic	Linkletter 1977 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, McQuoid & Hobson 1997, McQuoid & Hobson 2001, Hay et al. 2003, Rozanska et al. 2008, Horner 2002, Rawlence 1987)
Thalassiosira aestivalis Gran & Angst	*Thalassiosira aestivalis* Gran (ab)		West (US)	Horner et al. 2005 (Sancetta & Calvert 1988, McQuoid & Hobson 1997)

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Thalassiosira angulata (Gregory) Hasle	*Thalassiosira angulata* (Gregory) Hasle (ab)	*Orthoseira angulata* Gregory, *Thalassiosira decipiens* (Grunow) E.G. Jørgensen	East/West (Effingham inlet)/Arctic	Hay et al. 2003 (Lovejoy et al. 2002)
Thalassiosira anguste-lineata (A. Schmidt) Fryxell & Hasle	*Thalassiosira anguste-lineata* (A. Schmidt) G. Fryxell & Hasle (ab)	*Thalassiosira polychorda* (Gran) Jørgensen, *Coscinodiscus polychordus* Gran, *Coscinodiscus anguste-lineata* A. Schmidt, *Coscinosira polychorda* (Gran) Gran	East/West /Arctic	Horner et al. 2005 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Lovejoy et al. 2002, Booth & Horner 1997, McQuoid & Hobson 1997, McQuoid & Hobson 2001)
Thalassiosira antarctica	*Thalassiosira antarctica* Comber (ab)	*Thalassiosira antarctica* Karsten, *Thalassiosira fallax* Meunier, *Thalassiosira antarctica* var. *borealis* G. Fryxell, Doucette, & Hubbard	East	Bérard-Therriault et al. 1999 (Riedel et al. 2003)
Thalassiosira antarctica var. *borealis*	*Thalassiosira antarctica* Comber (ab)	*Thalassiosira antarctica* var. *borealis* G. Fryxell, Doucette, & Hubbard	Arctic	Riedel et al. 2003 (Lovejoy et al. 2002)
Thalassiosira baltica (Grun.) Osten.	*Thalassiosira baltica* (Grunow) Ostenfeld (ab)	*Coscinodiscus polyacanthus* var. *balticus* Grunow, *Coscinodiscus balticus* (Grunow) Grunow ex Cleve	East	Rawlence 1987 (Brunel 1962)
Thalassiosira bioculata	*Thalassiosira bioculata* (Grunow) Ostenfeld (ab)	*Coscinodiscus bioculatus* Grunow	East/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935)
Thalassiosira bioculata var. *exigua*	*Thalassiosira bioculata* var. *exigua* (Grunow) Hustedt (ab)		East	Bérard-Therriault et al. 1999
Thalassiosira bulbosa Syvertsen	*Thalassiosira bulbosa* E.E. Syvertsen (ab)		Arctic	Lovejoy et al. 2002
Thalassiosira condensata	*Detonula pumila* (Castracane) Gran	*Thalassiosira condensata* Cleve	East	Brunel 1962
Thalassiosira conferta Hasle in Hasle and Fryxell	*Thalassiosira conferta* Hasle (ab)		West (Effingham Inlet)	Hay et al. 2003 (Bérard-Therriault et al. 1999)

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Thalassiosira decipiens	*Thalassiosira angulata* (Gregory) Hasle (ab)	*Thalassiosira decipiens* (Grunow) E.G. Jørgensen, *Coscinodiscus decipiens* Grunow ex Van Heurck, *Thalassiosira gelatinosa* Hensen	East/West	Brunel 1962 (Gran & Braarud 1935, Hay et al. 2003)
Thalassiosira eccentrica (Ehrenberg) Cleve	*Thalassiosira eccentrica* (Ehrenberg) Cleve (ab)	*Coscinodiscus eccentricus* Ehrenberg, *Coscinodiscus labyrinthus* Roper	East/West	Horner et al. 2005 (Sancetta & Calvert 1988, McQuoid & Hobson 1997, McQuoid & Hobson 2001, Hay et al. 2003)
Thalassiosira fallax	*Thalassiosira antarctica* Comber (ab)	*Thalassiosira fallax* Meunier	East	Brunel 1962
Thalassiosira fluviatilis	*Thalassiosira weissflogii* (Grunow) G. Fryxell & Hasle (ab)	*Thalassiosira fluviatilis* Hustedt	East	Brunel 1962
Thalassiosira gravida Cleve	*Thalassiosira gravida* Cleve (ab)	*Thalassiosira tchernai* Manguin	East/West(US)/ Arctic	Rawlence 1987 (Cupp 1943, Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, Bursa 1963, Gran & Braarud 1935, McQuoid & Hobson 1997, McQuoid & Hobson 2001)
Thalassiosira hyalina	*Thalassiosira hyalina* (Grunow) Gran (ab)	*Coscinodiscus hyalinus* Grunow	East/Arctic	Bérard-Therriault et al. 1999 (Brunel 1962, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935)
Thalassiosira kushirensis	*Thalassiosira kushirensis* Takano (ab)	*Thalassiosira solitaria* Gayoso	East	Bérard-Therriault et al. 1999
Thalassiosira levanderi	*Thalassiosira levanderi* Van Goor (ab)		East	Brunel 1962
Thalassiosira cf. *leptopus* (Grunow) Hasle & Fryxell	*Thalassiosira leptopus* (Grunow ex Van Heurck) Hasle & G. Fryxell (ab)	*Coscinodiscus leptopus* var. *discrepans* Rattray, *Coscinodiscus pseudolineatus* Pantocsek, *Coscinodiscus leptopus* Grunow, *Coscinodiscus lineatus* Ehrenberg, *Coscinodiscus praelineatus* Jousé	East/West (Effingham Inlet)	Hay et al. 2003

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Thalassiosira nana	*Thalassiosira nana* Lohmann (ab)		East	Brunel 1962
Thalassiosira nordenskioeldii Cleve	*Thalassiosira nordenskioeldii* Cleve (ab)		East/West/Arctic	Horner et al. 2005 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, Brunel 1962, Riedel et al. 2003, Lovejoy et al. 2002, Gran & Braarud 1935, Bates & Strain 2006, McQuoid & Hobson 1997, McQuoid & Hobson 2001, Hay et al. 2003)
Thalassiosira oceanica	*Thalassiosira oceanica* Hasle (ab)	*Cyclotella nana* Hustedt	East	Bérard-Therriault et al. 1999
Thalassiosira oestrupii (Ostenfeld) Hasle	*Thalassiosira oestrupii* (Ostenfeld) Hasle (ab)	*Coscinosira oestrupii* Ostenfeld, *Thalassiosira antiqua* var. *septata* Proschkina-Lavrenko	East/West (Effingham inlet)	Hay et al. 2003
Thalassiosira pacifica Gran & Angst	*Thalassiosira pacifica* Gran & Angst (ab)		East/West	Horner et al. 2005 (Sancetta & Calvert 1988, Bérard-Therriault et al. 1999, McQuoid & Hobson 2001, Hay et al. 2003)
Thalassiosira plicata	*Thalassiosira plicata* H. J. Schrader (ab)		West	McQuoid & Hobson 1997
Thalassiosira proschkinae	*Thalassiosira proschkinae* Makarova (ab)	*Thalassiosira spinulata* Takano, *Thalassiosira proschkinae* var. *spinulata* (Takano) Makarova	East	Bérard-Therriault et al. 1999
Thalassiosira pseudonana	*Thalassiosira pseudonana* Hasle & Heimdal (ab)		East	Bérard-Therriault et al. 1999
Thalassiosira punctigera (Castracane) Hasle	*Thalassiosira punctigera* (Castracane) Hasle (ab)	*Thalassiosira japonica* Kisselev, *Ethmodiscus japonicus* Castracane, *Ethmodiscus punctiger* Castracane, *Thalassiosira angstii* (Gran) Makarova	East (BoF)/West	Horner et al. 2005 (Sancetta & Calvert 1988, Carver & Mallet 2002)
Thalassiosira rotula Meunier	*Thalassiosira rotula* Meunier (ab)		East/West/Arctic	Horner et al. 2005 (Sancetta & Calvert 1988, Brunel 1962, Bursa 1963)
Thalassiosira sp.	*Thalassiosira* sp.		East/Arctic	Bursa 1963 (Gran & Braarud 1935)

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Thalassiosira subtilis (Osten.) Gran.	*Thalassiosira subtilis* (Ostenfeld) Gran (ab)	*Podosira subtilis* Ostenfeld	East/West(US)	Rawlence 1987 (Cupp 1943, Brunel 1962, Bursa 1963)
Thalassiosira tenera Proschkina-Lavrenko	*Thalassiosira tenera* Proschkina-Lavrenko (ab)		East/West (Effingham Inlet)	Hay et al. 2003 (Bérard-Therriault et al. 1999)
Thalassiothrix longissima Cleve and Grunow	*Thalassiothrix longissima* Cleve & Grunow (ab)	*Synedra thalassiothrix* Cleve	East/West(US)/ Arctic	Linkletter et al. 1977 (Cupp 1943, Bérard-Therriault et al. 1999, Fritz 1921, Bursa 1963, Lovejoy et al. 2002, Gran & Braarud 1935)
Thalassiothrix nitzschioides	*Thalassionema nitzschioides* (Grunow) Mereschkowsky (ab)	*Thalassiothrix nitzschioides* (Grunow) Grunow	East	Fritz 1921 (Brunel 1962)
Trachyneis aspera (Ehrenberg) Cleve	*Trachyneis aspera* (Ehrenberg) Cleve (ab)	*Navicula stauroneiformis* Leuduger-Fortmorel, *Pinnularia aspera* (Ehrenberg) Ehrenberg, *Stauroneis pulchella* W.Smith, *Stauroneis achnanthes* (Ehrenberg) Kützing, *Stauroneis aspera* (Ehrenberg) Kützing, *Stauroptera aspera* Ehrenberg, *Navicula aspera* Ehrenberg, *Navicula aspera* var. *genuina* (Cleve) Fricke	East	Bailey 1913 (Thaler 2007)
Triceratium alternans	*Biddulphia alternans* (J.W. Bailey) Van Heurck	*Triceratium alternans* J.W. Bailey	East	Bérard-Therriault et al. 1999
Triceratium favus	*Triceratium favus* Ehrenberg	*Triceratium comptum* Ehrenberg, *Triceratium muricatum* Brightwell, *Triceratium fimbriatum* Wallich, *Biddulphia favus* (Ehrenberg) Grunow, *Triceratium ferox* Castracane, *Triceratium sarcophagus* Castracane	East	Brunel 1962
Triceratium sp.	*Triceratium* sp.		West	McQuoid & Hobson 2001
Trigonium sp.	*Trigonium* sp.		West	Hobson 2009
Tropidoneis antarctica var. *polyplasta* Gran & Angst	*Tropidoneis antarctica* var. *polyplasta* Gran & Angst (ab)		West	Horner (pers. comm.)[3]

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Tropidoneis lepidoptera (Gregory) Cleve	*Tropidoneis lepidoptera* (Gregory) Cleve (ab)	*Amphiprora lepidoptera* Gregory, *Tropidoneis lepidoptera* var. *mediterranea* Peragallo	West (US)	Cupp 1943
Tropidoneis sp.	*Tropidoneis* sp.		Arctic	Booth & Horner 1997
Tryblionella gracilis	*Nitzschia tryblionella* Hantzsch (ab)	*Tryblionella gracilis* W. Smith	East	Bailey 1910 (Bailey 1913)
Tryblionella levidensis W.Smith	*Tryblionella levidensis* W. Smith (ab)	*Nitzschia levidensis* (W.Smith) Grun, *Nitzschia tryblionella* var. *levidensis* (W. Smith) Grunow, *Denticula levidensis* (W. Smith) De Toni, *Tryblionella tryblionella* var. *levidensis* (W. Smith) Prochazka, *Tryblionella hantzschiana* var. *levidensis* (W. Smith) Frenguelli	East	Thaler 2007 (Poulin et al. 1990)
Tryblionella scutellum Sm.	*Tryblionella scutellum* W. Smith (ab)		East	Bailey 1910 (Bailey 1913)
Urosolenia eriensis (H.L. Smith) Round & Crawford	*Urosolenia eriensis* (H.L. Smith) F.E. Round & R.M. Crawford (ab)	*Rhizosolenia eriensis* H.L. Smith, *Rhizosolenia eriensis* var. *genuina* A. Cleve-Euler	East (BoF)	Ginn (pers. comm.)[1] (Bérard-Therriault et al. 1999)
Zygoceros mobilensis Bail.	*Odontella mobiliensis* (J.W. Bailey) Grunow	*Zygoceros mobiliensis* J.W. Bailey	East	Bailey 1910